

UNITED STATES DEPARTMENT OF VETERAN AFFAIRS EDWARD HINES, JR. V.A. ITC

BUILDING 215; HINES, ILLINOIS 60141-5000

NEW FIRE ALARM SYSTEM; CONTRACT VA69DP-0769A TASK ORDER # 23

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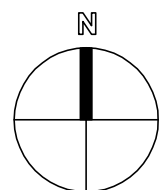
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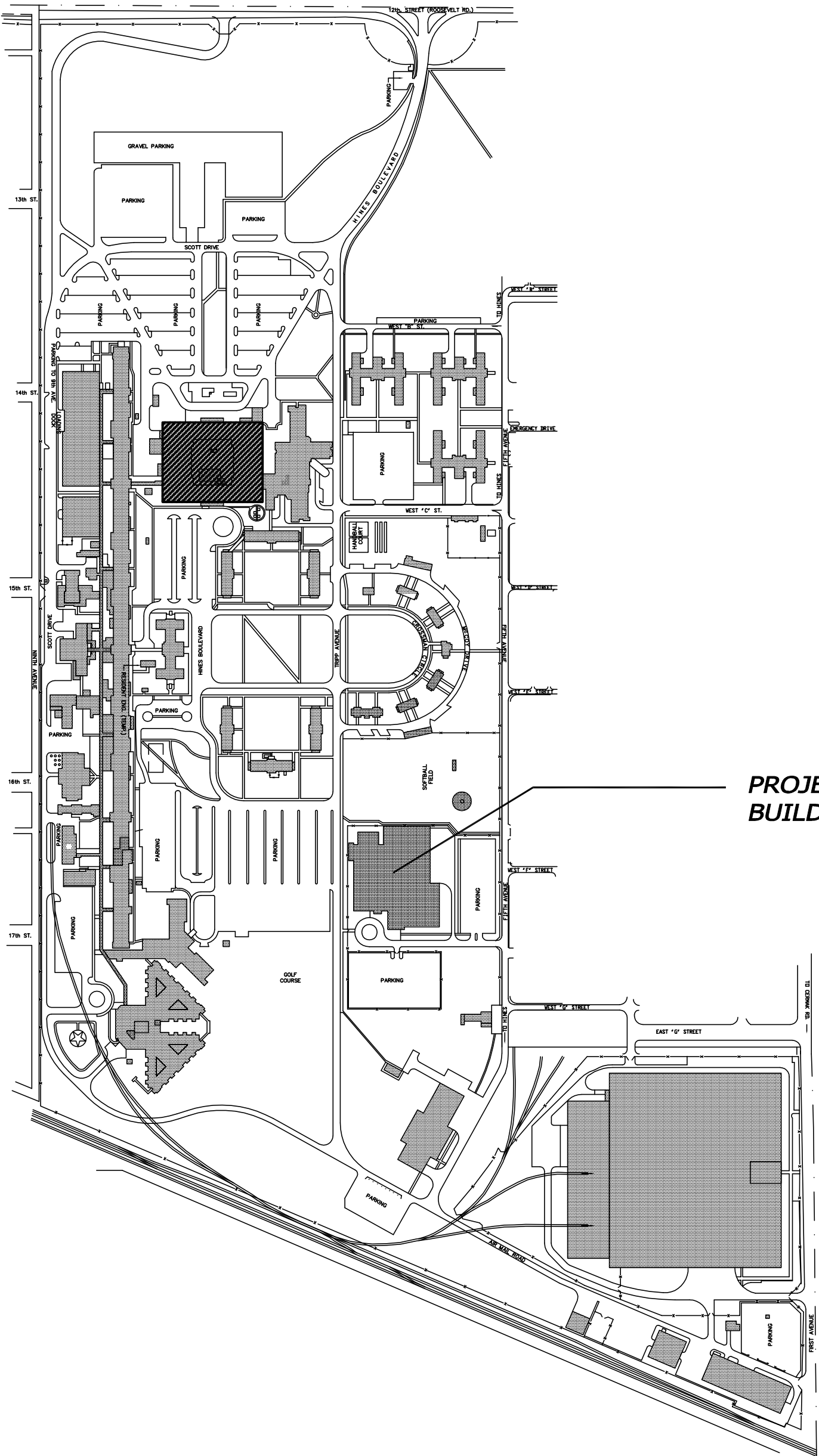
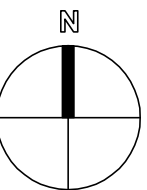
STRUCTURAL | MECHANICAL | ELECTRICAL
TECHNOLOGY | MEDICAL EQUIPMENT SOLUTIONS

VICINITY MAP

PROJECT
VICINITY



SITE MAP



PROJECT LOCATION
BUILDING 215

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0 1 2 3

VA Hines Bldg. 215 New Fire Alarm System
CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

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DESIGNED BY	DRAWN BY	CHECKED BY
SRH	EV	BJL
PROJECT NUMBER	DATE	
11.0463.00	03.30.2012	
SHEET DESCRIPTION		
GENERAL COVER SHEET		
SHEET NUMBER		
G001		

ELECTRICAL EXIT LIGHTING SYMBOL LIST		
REFER TO LUMINAIRE SCHEDULE FOR DIMENSIONS AND TYPES		
SYMBOL:	DESCRIPTION:	
	SINGLE FACE EXIT SIGN	SHADING INDICATES ILLUMINATED FACE(S).
	DOUBLE FACE EXIT SIGN	ARROWS INDICATE DIRECTION TO EXIT
	EMERGENCY LIGHTING UNIT	
	COMBINATION EXIT AND EMERGENCY LIGHTING UNIT	
	2'X2' LAY-IN WITH BATTERY BACK-UP	
	EMERGENCY LIGHTING UNIT	

ELECTRICAL SYSTEMS SYMBOL LIST	
SYMBOL:	DESCRIPTION:
WALL CLO FLOOR MOUNT	
	FIRE ALARM - ANNUNCIATOR
	FIRE ALARM - NOTIFICATION EXTENDER PANEL (NEP-#)
	FIRE ALARM - HORN
	FIRE ALARM - VISUAL DEVICE
	FIRE ALARM - MANUAL PULL STATION
	FIRE ALARM - MANUAL PULL STATION WITH TAMPER GUARD
	FIRE ALARM - AUDIO/VISUAL DEVICE
	FIRE ALARM - WEATHERPROOF AUDIO/VISUAL DEVICE
	FIRE ALARM - AUDIO DEVICE
	FIRE ALARM - MINI-HORN
	FIRE ALARM - HEAT DETECTOR
	HEAT DETECTOR RATE OF RISE / FIXED TEMPERATURE.
	HEAT DETECTOR - EXPLOSION PROOF
	FIRE ALARM - FLAME DETECTOR
	FIRE ALARM - BEAM SMOKE DETECTOR
	FIRE ALARM - SMOKE DETECTOR (UF = UNDERFLOOR)
	FIRE ALARM - DUCT TYPE SMOKE DETECTOR
	FIRE ALARM - ADDRESSABLE RELAY
	FIRE ALARM - ADDRESSABLE RELAY DAMPER CONTROL
	FIRE ALARM - RELAY
	FIRE ALARM - CONTROL MODULE
	FIRE ALARM - MONITOR MODULE
	FIRE PROTECTION - FLOW SWITCH
	FIRE PROTECTION - TAMPER SWITCH
	FIRE ALARM - REMOTE TEST SWITCH (BUTTON)
	FIRE ALARM - FIRE FIGHTER MICROPHONE
	FIRE PROTECTION - ELECTRIC BELL
	DOOR HOLD OPEN
	ELEVATOR HOISTWAY DAMPER
	FIRE ALARM - BELL
EXISTING DEVICES SHOWN FOR REFERENCE ONLY	
	CARD READER
	REQUEST TO EXIT
	FIRE EXTINGUISHER

* ALL SYMBOLS AND ABBREVIATIONS LISTED MAY NOT BE APPLICABLE TO THIS PROJECT. REFER TO GENERAL ELECTRICAL EQUIPMENT SCHEDULE FOR MORE COMPLETE DESCRIPTION AND ADDITIONAL SYMBOLS.

EXISTING FM200 SYSTEMS SYMBOL LIST	
(DEVICES SHOWN FOR REFERENCE ONLY TO REMAIN) RP-1001 PANELS LOCATED IN ROOMS 147B, 147X AND 147Y.	
SYMBOL:	DESCRIPTION:
	FIRE ALARM - IONIZATION DETECTOR
	FIRE ALARM - PHOTOELECTRIC DETECTOR
	FIRE ALARM - ABORT SWITCH (EMERGENCY POWER OFF)
	FIRE ALARM - MANUAL PULL STATION
	FIRE ALARM - AUDIO/VISUAL DEVICE
	FIRE ALARM - VISUAL DEVICE
	FIRE ALARM - BELL
	FIRE ALARM - SMOKE DAMPER OR FIRE/SMOKE DAMPER
	FIRE ALARM - RP-1001 ANNUNCIATOR PANEL

EXISTING PREACTION SUPPRESSION SYSTEMS SYMBOL LIST	
(DEVICES SHOWN FOR REFERENCE ONLY ALL TO REMAIN) LOCATED IN ROOM 100	
SYMBOL:	DESCRIPTION:
	FIRE ALARM - ABORT SWITCH (EMERGENCY POWER OFF)
	FIRE ALARM - MANUAL PULL STATION
	FIRE ALARM - AUDIO/VISUAL DEVICE
	FIRE ALARM - VISUAL DEVICE
	FIRE ALARM - BELL
	FIRE ALARM - PRE ACTION PANEL
	FIRE ALARM - SMOKE DETECTOR
	FIRE ALARM - UNDER FLOOR SMOKE DETECTOR
	FIRE ALARM - BEAM SMOKE TRANSMITTER
	FIRE ALARM - BEAM SMOKE RECEIVER

EXISTING PREACTION SUPPRESSION SYSTEMS SYMBOL LIST	
(DEVICES SHOWN FOR REFERENCE ONLY ALL TO REMAIN) LOCATED IN ROOM 166A,B,D	
SYMBOL:	DESCRIPTION:
	HEAT DETECTOR
	SMOKE DETECTOR

ELECTRICAL DEMOLITION SYMBOL LIST	
SYMBOL:	DESCRIPTION:
-----	INDICATES EXISTING TO REMAIN
-----	INDICATES EXISTING TO BE REMOVED.
MOUNTED	
WALL CEILING	
	FIRE ALARM - VISUAL DEVICE
	FIRE ALARM - MANUAL PULL STATION
	FIRE ALARM - AUDIO/VISUAL DEVICE
	FIRE ALARM - SMOKE DETECTOR
	ALARM BELL
	FIRE ALARM - ANNUNCIATOR
	FIRE ALARM - SMOKE DAMPER OR FIRE/SMOKE DAMPER
	FIRE ALARM - ADDRESSABLE RELAY
	SINGLE OR DOUBLE FACE EXIT SIGN
	EMERGENCY LIGHTING UNIT

ELECTRICAL DEMOLITION NOTES:

- THE ELECTRICAL DRAWINGS INDICATE EXISTING ELECTRICAL ITEMS TO BE REMOVED. THE DRAWINGS ARE INTENDED TO INDICATE THE SCOPE OF WORK REQUIRED AND DO NOT INDICATE EVERY BOX, CONDUIT, OR WIRE THAT MUST BE REMOVED. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND VERIFY EXISTING CONDITIONS.
- ELECTRICAL ITEMS (I.E., LIGHTING FIXTURES, SWITCHES, ETC.) REMOVED AND NOT RELOCATED REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF MATERIAL THE OWNER DOES NOT WANT TO REUSE OR RETAIN (I.E., FOR MAINTENANCE PURPOSES).
- THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER BEFORE TURNING OFF POWER TO CIRCUITS, FEEDERS, PANELS, ETC. COORDINATE ALL OUTAGES WITH OWNER. CONDUIT CONCEALED IN WALL CONSTRUCTION MAY BE ABANDONED IN PLACE IF NOT AFFECTED BY OTHER CONSTRUCTION.
- THIS CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH OTHER CONTRACTORS AT THE JOB SITE BEFORE REMOVING EXISTING ELECTRICAL AND INSTALLING NEW ITEMS.
- EXISTING CONDUIT IN GOOD CONDITION, MAY BE REUSED IN PLACE. RELOCATED EXISTING CONDUIT SHALL NOT BE ALLOWED. BONDING CONDUCTORS SHALL BE INSTALLED IN ALL REUSED CONDUIT TO ASSURE PROPER GROUND PATH.
- EQUIPMENT REMOVAL IN CERTAIN LOCATIONS MAY REQUIRE THE INSTALLATION OF A JUNCTION BOX TO RECONNECT CIRCUITS THAT REMAIN IN OPERATION. EXTEND CONDUIT AND WIRING AS REQUIRED TO MAINTAIN POWER TO REMAINING EQUIPMENT.

GENERAL ELECTRICAL NOTES:

- "1/3301" INDICATES DETAIL NUMBER/SHEET NUMBER.
- INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL IT IS SHOWN WITH.
- SHADED LUMINAIRE OR DEVICE INDICATES LUMINAIRE OR DEVICE IS CONNECTED TO AN EMERGENCY CIRCUIT.
- ALL ELECTRICAL CONDUCTORS SHALL BE COPPER.
- INDICATES NUMBER OF WIRES IN CONDUIT.
- GROUND WIRE
NEUTRAL WIRE
PHASE WIRE
- ABBREVIATION KEY:
E.C. ELECTRICAL CONTRACTOR
M.C. MECHANICAL CONTRACTOR
G.C. GENERAL CONTRACTOR
AFF ABOVE FINISHED FLOOR
C CONDUIT
TYP TYPICAL
CONTR CONTRACTING OFFICE OF RECORD
- MOUNTING SUBSCRIPT KEY:
+# MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE
o RECEPTACLES:
A MOUNT ABOVE COUNTER (+6" TO CENTERLINE ABOVE COUNTER OR BACKPLASH)
L MOUNT IN LAB CASEWORK
- LINE TYPE KEY:
NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)
NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK SHORT DASHED LINE)

ELECTRICAL INSTALLATION NOTES:

- THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
- CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.
- CIRCUITS SERVING EMERGENCY AND EXIT LUMINAIRES WILL BE RUN IN SEPARATE RACEWAY FROM ALL OTHER CIRCUITS.
- MINIMUM OF A #12 GREEN INSULATED GROUND CONDUCTOR SHALL BE INSTALLED WITH CIRCUIT CONDUCTORS IN EACH HOME RUN.
- CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND IN FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE. FISH FLEXIBLE CONDUIT IN EXISTING WALLS TO CONCEAL WHERE WALL CONSTRUCTION DOES NOT ALLOW FISHING CONDUIT, DISCUSS POSSIBLE SOLUTION WITH THE OWNER AND ENGINEER BEFORE PROCEEDING.
- BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- CONTRACTOR SHALL COORDINATE THE LOCATION OF ANY DETECTORS AND/OR SPEAKERS WITH SPRINKLER AND CEILING DIFFUSERS WITH THE LIGHTING FIXTURE LAYOUT. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS SHALL BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPPS. SEE SECTION 07.84.00.
- ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB.
- CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF ELECTRICAL WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. CONTRACTOR SHALL REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.

INSTALLATION NOTES:

- CERTAIN AREAS INDICATED ON THE DRAWINGS REQUIRE OFF-SHIFT WORK HOURS. CONTRACTOR SHALL COORDINATE OFF HOURS WITH COTR TO SCHEDULE WORK HOURS. CONTRACTOR SHALL WORK ON ONE ROOM AT A TIME.
- CONTRACTOR SHALL PROVIDE PROTECTION OVER COMPUTER STACKS AND DEVICES FROM DUST AND DEBRIS.
- EXISTING FIRE ALARM SYSTEM SHALL REMAIN IN OPERATION UNTIL NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND TESTED. DISCONNECT AND REMOVE OLD FIRE ALARM SYSTEM ASSOCIATED DEVICES, WIRING AND CONDUIT AFTER NEW SYSTEM HAS BEEN IN OPERATION.
- CONTRACTOR SHALL PROVIDE AND INSTALL LABELS FOR EACH FIRE ALARM DEVICE BOX AND ON THE OUTSIDE OF THE DEVICE. THE LABELS SHALL INDICATE DEVICE ADDRESS AND TYPED SHALL BE WHITE WITH RED LETTERING.
- SUGGESTED CONDUIT ROUTING SHOWN ON DOCUMENTS IS ONLY A SUGGESTION BASED UPON FIELD VERIFIED CONGESTED CORRIDOR CEILING SPACES.

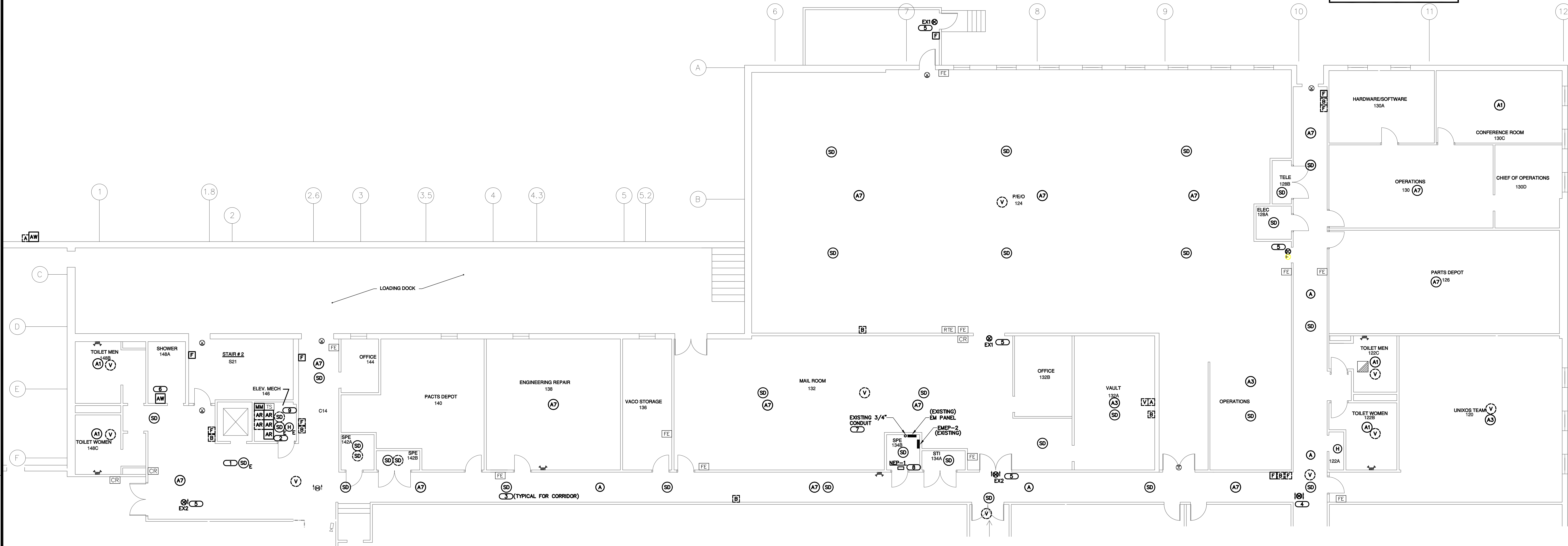
APPLICABLE CODES:

CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND LOCAL AMENDMENTS. ILLINOIS AUTHORITIES HAVING JURISDICTION (AHJ)

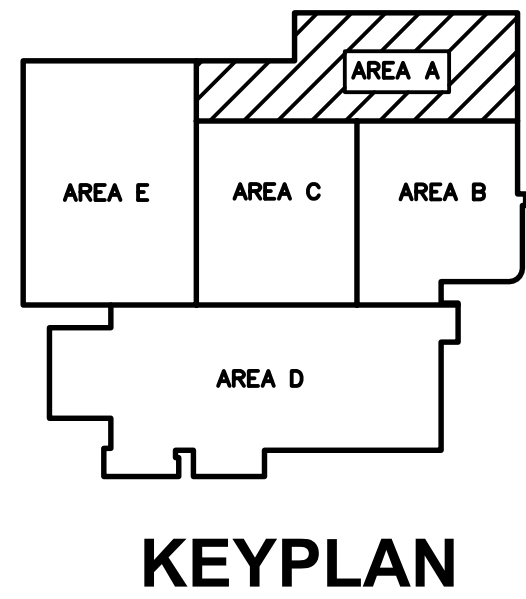
ELECTRIC CODE: NEC 2008 EDITION
NATIONAL FIRE CODE: 2006 EDITION
LIFE SAFETY CODE: NFPA 101 2009 EDITION
MODEL ENERGY CODE: IEC 2006
I.A. STANDARD: CURRENT ISSUE
ILLINOIS BUILDING CODE: CURRENT ISSUE

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11.0463.00	03.30.2012	
SHEET DESCRIPTION		
ELECTRICAL COVER SHEET		
SHEET NUMBER		
E001		

K:\JW\11-0463.00-VA Hines Bldg. 215 New Fire Alarm System



FIRST FLOOR PLAN - AREA A FIRE ALARM
SCALE: 1/8"=1'-0"



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- KEYNOTES**
1. MOUNT SMOKE DETECTOR WITHIN 5' OF ELEVATOR DOOR, FIELD VERIFY AND COORDINATE NEW CONDUIT LOCATION ABOVE THE CEILING.
 2. RELAY FOR ELEVATOR RECALL, ALTERNATE FLOOR RECALL AND MACHINE ROOM UNSAFE ALARM.
 3. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
 4. RELOCATED EXISTING EXIT SIGN TO NEW LOCATION SHOWN, APPROXIMATE ONE CEILING TILE TO THE SOUTH.
 5. PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA. WHERE NEW SIGN IS INSTALLED WITHOUT AN EXISTING SIGN, CONNECT TO NEAREST EMERGENCY CIRCUIT SERVING AREA AHEAD OF SWITCHING. FIELD VERIFY CONDUIT LOCATION AS NEEDED.
 6. PROVIDE A WEATHER PROOF DEVICE AS REQUIRED. REFER TO SHEET E400.
 7. IN THE ELECTRICAL CLOSET (134B) FROM EXISTING PANEL, EMEP-2 USE EXISTING SPARE CIRCUIT #18 TO PROVIDE POWER TO NEW NEP-1 PANEL AND NEW NEP-4 ABOVE ON 2ND FLOOR. ROUTE NEW 2#12 & 1#2 GROUND WIRES THRU EXISTING 3/4" CONDUIT UP TO FEED 2ND FLOOR NEP-4 LOCATED IN CLOSET (214B) ABOVE. PROVIDE NEW CONDUIT WHERE REQUIRED. REFER TO SHEET E203.
 8. NOTIFICATION EXTENDER PANELS TO BE MOUNTED ON WALL ABOVE DOOR AS INDICATED.
 9. MOUNT HEAT DETECTOR WITHIN 2' OF SPRINKLER HEAD.

- GENERAL ELECTRICAL NOTES**
1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
 2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
 3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
 4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
 5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
 6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
 7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
 8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

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CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

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SHEET DESCRIPTION		
FIRST FLOOR PLAN - AREA A FIRE ALARM		
SHEET NUMBER		
E101		

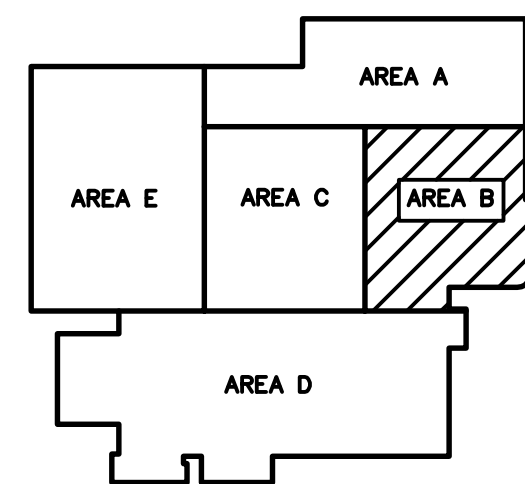
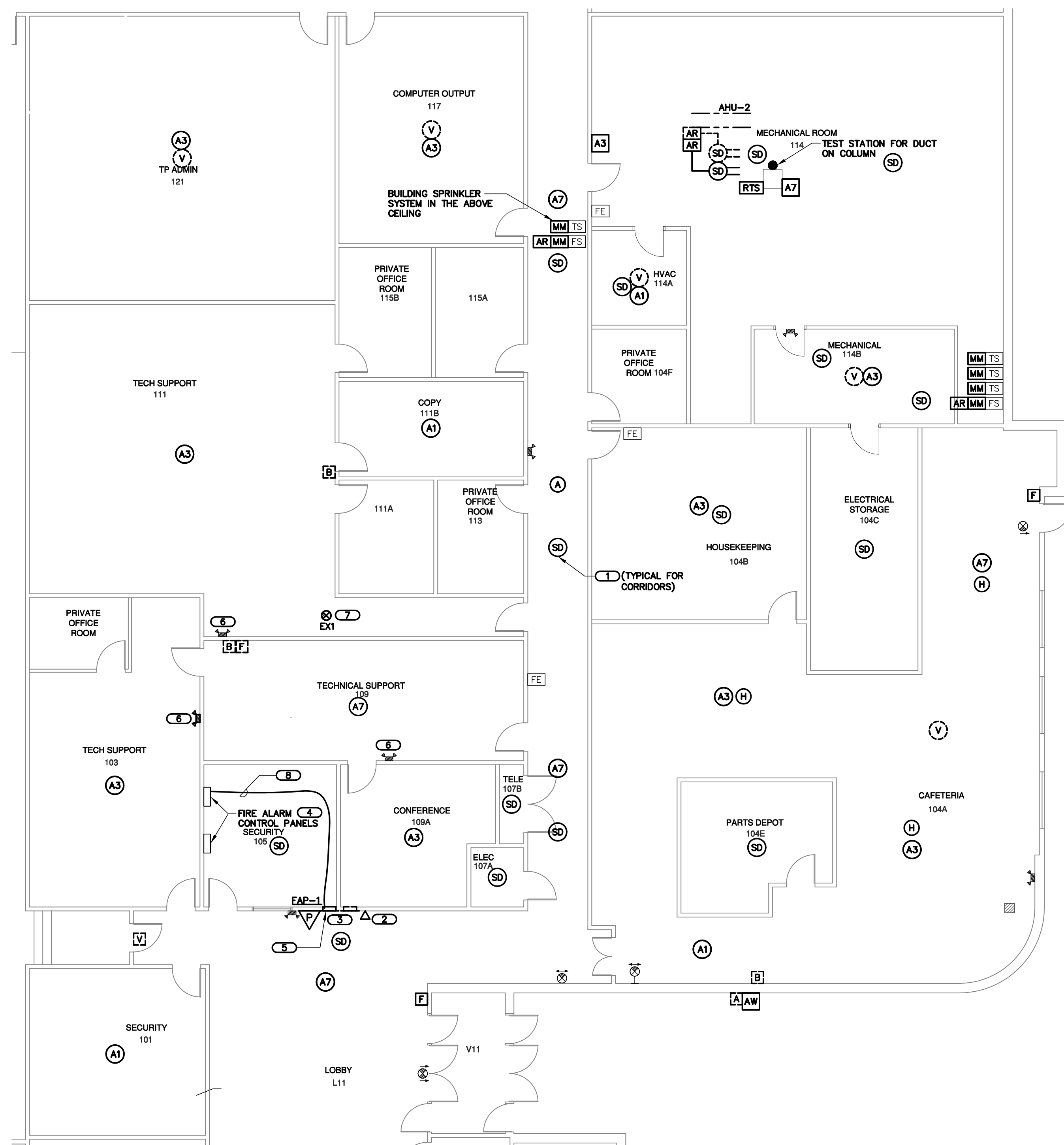
**VA Hines Bldg. 215 New Fire Alarm System
CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS**

GENERAL ELECTRICAL NOTES

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2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
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6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

KEYNOTES

1. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
2. EXTEND EXISTING CAT6 DATA CONNECTION FOR INTERNET CAPABILITY TO NEW WORKSTATION.
3. PATCH AND FINISH WALL AFTER EXISTING ANNUNCIATOR PANEL HAS BEEN REMOVED AND NEW FIRE ALARM PANEL IS INSTALLED. PROVIDE A TEMPORARY SUPPORT BOARD TO HOLD THE EXISTING ANNUNCIATOR ANNUNCIATOR DURING INSTALLATION OF THE NEW FIRE ALARM PANEL.
4. EXISTING FIRE ALARM CONTROL PANELS AND BELLMAN/STATIONARY BELL WILL BE BROUGHT THROUGH THE BUILDING TO BE RELOCATED TO THE EXISTING FIRE ALARM SYSTEM IS TESTED AND ACCEPTED.
5. PROVIDE NEW FIRE ALARM CONTROL PANEL IN THE SAME LOCATION AS THE EXISTING ANNUNCIATOR. FIRE FIGHTER WORKSTATION PROVIDED WITH THE NEW FIRE ALARM PANEL.
6. PROVIDE NEW EMERGENCY LIGHTING UNIT AND WIRING TO EXISTING CIRCUIT FOR THE LOCAL LIGHTING.
7. PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA. FIELD VERIFY THE OPERATION AS REQUESTED.
8. INTERCEPT FIBER OPTIC CONDUIT FROM BUILDING #1 TO EXISTING PAGER PANEL IN BUILDING #215 AND EXTEND (4) FOUR INCH CONDUIT TO NEW LOCATION. PROVIDE 3/4" CONDUIT AND FIBER OPTIC CONDUIT TO NEW LOCATION. PROVIDE FIBER OPTIC SPLICER BOX AND NEW FIBER OPTIC PATCH PANEL. NEW FIBER OPTIC PANEL WILL NOT REACH TO NEW PANEL.

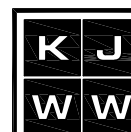


KEYPLAN



FIRST FLOOR PLAN - AREA B FIRE ALARM

SCALE: 1/8"=1'-0"



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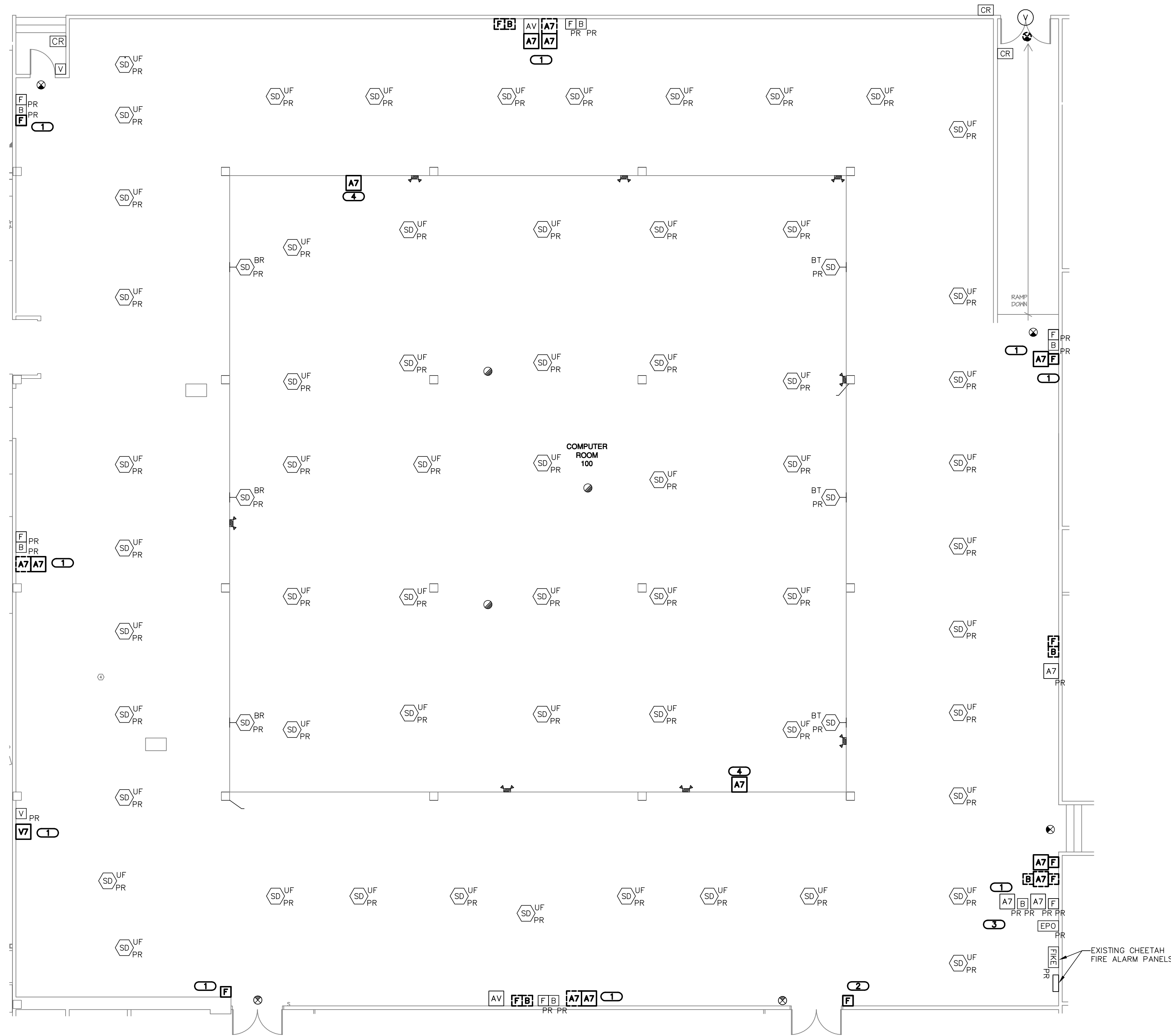
SRH	EV	BJL
PROJECT NUMBER 11.0463.00	DATE 03.30.2012	

SHEET DESCRIPTION
FIRST FLOOR PLAN -
AREA B FIRE ALARM

SHEET NUMBER

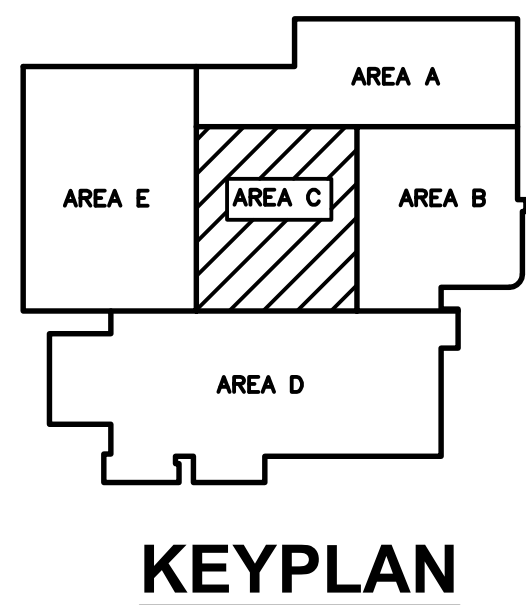
E102

K:\JW\11-0463-00-VA Hines Bldg. 215 New Fire Alarm System



1 FIRST FLOOR PLAN - AREA C FIRE ALARM
SCALE: 1/8"=1'-0"

- GENERAL ELECTRICAL NOTES**
1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
 2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
 3. REFER TO SHEET E300 FOR FIRE ALARM RISES DIAGRAM.
 4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
 5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
 6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
 7. REFER TO SHEET EZ100 AND EZ200 FOR SPEAKER ZONES.
 8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.
- KEYNOTES**
1. CONNECT NEW SIMPLEX DEVICES WHERE INDICATED ADJACENT TO THE EXISTING SYSTEM TO BE REMOVED. THE EXISTING PRE-ACTION SUPPRESSION SYSTEM IS TO REMAIN.
 2. PROVIDE NEW PULL STATION AS SHOWN AND CONNECT TO NEW SIMPLEX FAP--1.
 3. REFER TO ELEVATION DETAIL 3/E400.
 4. MOUNT AT BOTTOM OF CLERESTORY WALL.



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PROJECT # 11-0463.00

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VA Hines Bldg. 215 New Fire Alarm System
CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
1	8/3/10	ADDENDUM 1 FINAL REVIEW

DESIGNED BY: SRH
DRAWN BY: EV
CHECKED BY: BJL

PROJECT NUMBER: 11.0463.00
DATE: 03.30.2012

SHEET DESCRIPTION:
FIRST FLOOR PLAN - AREA C FIRE ALARM

SHEET NUMBER:
E103

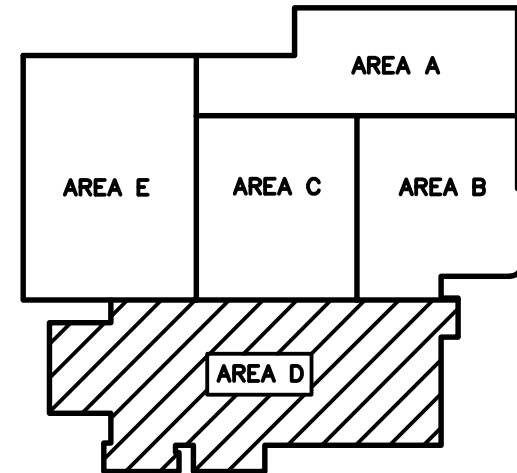
K:\JW\10463.00_VA Hines Bldg. 215 New Fire Alarm System



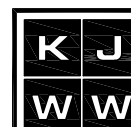
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FIRST FLOOR PLAN - AREA D FIRE ALARM

SCALE: 1/8"=1'-0"



KEYPLAN



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KEYNOTES

11. ALL EXISTING CONDUIT AND BOXES LOCATED IN FIREPROOF BLANKET ON STRUCTURAL STEEL IS TO REMAIN. CABLE IS TO BE REMOVED. BLANK PLATES INSTALLED ON BOXES. ALL CONDUIT AND BOXES BELOW THE FIRE PROOFING ARE TO BE REMOVED.
12. IN THE ELECTRICAL CLOSET (150B) FROM PANEL 1SWPEM-A USE EXISTING SPARE CIRCUIT #20 TO PROVIDE POWER TO NEW NEP-2 AND NEP-3 PANEL. ROUTE NEW WIRES THRU EXISTING 3/4" CONDUIT THAT FEEDS UP TO THE 2ND FLOOR ELECTRICAL CLOSET (236B) FROM PANEL 1SWPEM CIRCUITS #31 & #33. EXTEND NEW 3/4" CONDUIT TO NEP-5.
13. PROVIDE (1) 3/4" CONDUIT WITH 2#12 AND 1#12 GROUND FROM PANEL 1SWPEM IN ELECTRICAL ROOM 166C BACK TO THE ELECTRICAL CLOSET (163A). USE EXISTING SPARE CIRCUIT #22 TO POWER NEW NEP-3. FIELD COORDINATE EXACT CONDUIT LOCATION.
14. NOTIFICATION EXTENDER PANELS TO BE MOUNTED ON WALL ABOVE DOOR AS INDICATED.
15. FIELD VERIFY AND COORDINATE ALL NEW CONDUIT RUNS ABOVE THE CEILING FOR THE INSTALLATION OF NEW FIRE ALARM DEVICES, AND NOTIFICATION EXTENDER PANELS.
16. MOUNT HEAT DETECTOR WITHIN 2' OF SPRINKLER HEAD.
17. INTERCEPT EXISTING EMPTY CONDUIT IN AREA PROVIDED BY A PREVIOUS CONTRACTOR. RUN NEW BUILDING SYSTEM FIRE ALARM DEVICES. INSTALL NEW CABLE TO FAP-1 AND INSTALL NEW DEVICES AS INDICATED.

KEYNOTES

1. MOUNT SMOKE DETECTOR WITHIN 5' OF ELEVATOR DOOR. FIELD VERIFY AND COORDINATE NEW CONDUIT LOCATION ABOVE THE CEILING.
2. RELAY FOR ELEVATOR RECALL, ALTERNATE FLOOR RECALL AND MACHINE ROOM UNSAFE ALARM.
3. PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA. FIELD VERIFY CONDUIT LOCATION IN CEILING.
4. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
5. PROVIDE NEW COMBINATION EXIT AND EMERGENCY LIGHTING UNIT. CONNECT TO CIRCUIT SERVING THE AREA. MATCH EXISTING MODEL TYPE.
6. PROVIDE NEW EMERGENCY LIGHTING UNIT. CONNECT TO CIRCUIT SERVING THE AREA. WHERE OLD UNIT EXIST, REMOVE AND DISPOSE OF.
7. PROVIDE NEW PROJECTED BEAM TYPE SMOKE DETECTORS TRANSMITTER AND RECEIVER. FIELD COORDINATE HEIGHT TO MISS OBSTRUCTION.
8. REMOVE ALL FIRE FIRE ALARM DEVICES AND WIRING AND REPLACE WITH NEW FIRE ALARM DEVICES AND WIRING TO THE NEW SIMPLEX SYSTEM. REUSE EXISTING CONDUIT AND BOXES. COORDINATE ROUTING FOR NEW CONNECTION TO THE SIMPLEX SYSTEM AFTER NEW SYSTEM IS OPERATIONAL. THIS WORK TO BE EXECUTED NEAR THE END OF THE PROJECT ON A WEEKEND.
9. REMOVE ALL SMOKE DETECTORS AND WIRING UNDER THE RAISED FLOOR AND REPLACE WITH NEW SMOKE DETECTORS AT SAME LOCATION USING THE EXISTING RACEWAY. CONNECT NEW WIRING AND DETECTORS TO THE NEW SIMPLEX SYSTEM AFTER NEW SYSTEM IS OPERATIONAL. THIS WORK TO BE EXECUTED NEAR THE END OF THE PROJECT ON A WEEKEND.
10. MOUNT NEW DEVICE INSIDE CONTROL ROOM ENCLOSURE ON WALL.

GENERAL ELECTRICAL NOTES

1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA. RISER DIAGRAM.
3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.



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CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
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04.06.12 ISSUED FOR FINAL REVIEW

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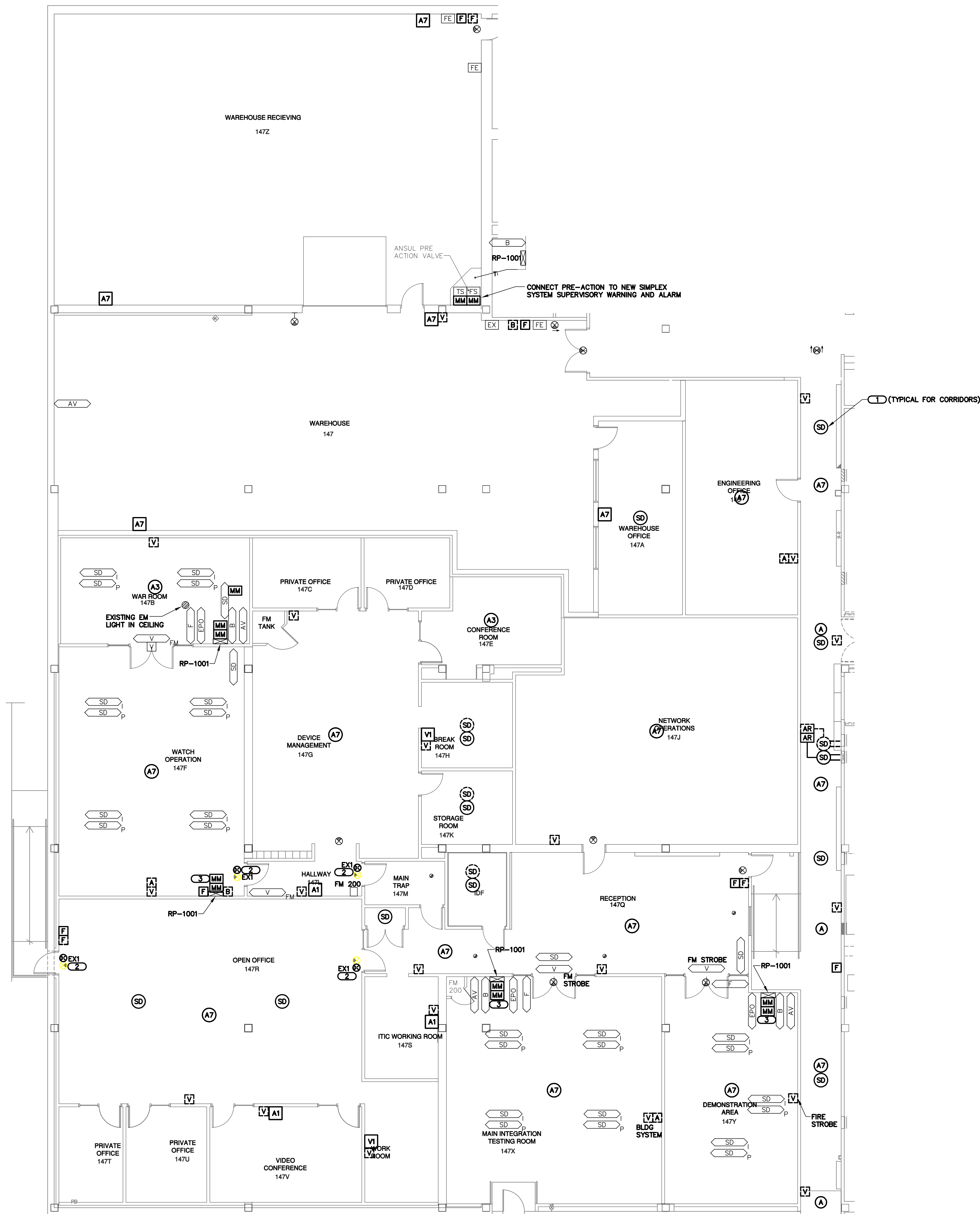
DESIGNED BY: SRH DRAWN BY: EV CHECKED BY: BJL

PROJECT NUMBER: 11.0463.00 DATE: 03.30.2012

SHEET DESCRIPTION: FIRST FLOOR PLAN - AREA D FIRE ALARM

SHEET NUMBER: E104

K:\JW\215-2015 New Fire Alarm System



FIRST FLOOR PLAN - AREA E FIRE ALARM

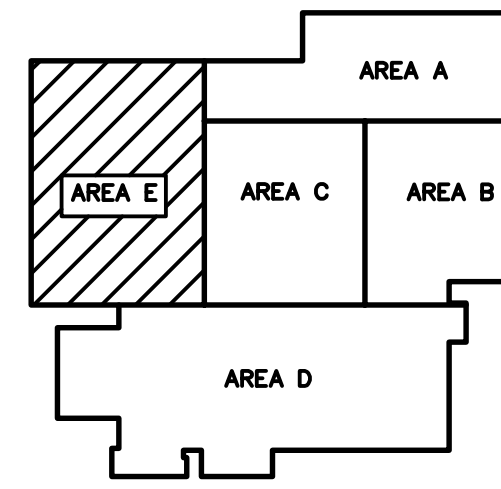
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GENERAL ELECTRICAL NOTES

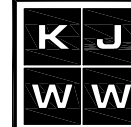
1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

KEYNOTES

1. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
2. PROVIDE NEW EXIT SIGN AND CONNECT TO EMERGENCY CIRCUIT SERVING THE AREA. FIELD VERIFY CONDUIT LOCATION AS NEEDED.
3. PROVIDE ADDRESSABLE MONITOR MODULES AT FM200 PANELS AS NEEDED. CONNECT TO EXISTING WIRING TO EXISTING FIRE ALARM PANEL. EXTEND WIRING TO NEW FAP-1.



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VA Hines Bldg. 215 New Fire Alarm System CONTRACT # VA69DP-0769A TASK ORDER # 23 HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
04.06.12	ISSUED FOR FINAL REVIEW	
DESIGNED BY	DRAWN BY	CHECKED BY
SRH	EV	BJL
PROJECT NUMBER	DATE	
11.0463.00	03.30.2012	
SHEET DESCRIPTION		
FIRST FLOOR PLAN - AREA E FIRE ALARM		
SHEET NUMBER		
E105		

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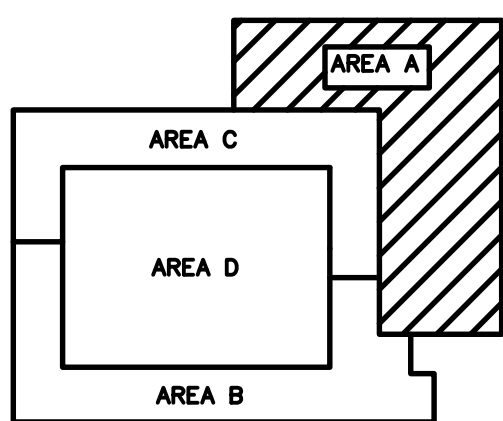
1 SECOND FLOOR PLAN - AREA A FIRE ALARM
SCALE: 1/8"=1'-0"

GENERAL ELECTRICAL NOTES

1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

KEYNOTES

1. PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA. FIELD VERIFY THAT MAXIMUM OF 15 EXIT SIGNS SHALL BE CONNECTED TO THE CIRCUIT.
2. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
3. PROVIDE (1) 3/4" CONDUIT WITH 2#12 AND 1#12 GROUND FROM PANEL 2SEM-A IN ELECTRICAL CLOSET (200S). USE EXISTING SPARE CIRCUIT #18 TO POWER NEW NEP-6. COORDINATE EXACT CONDUIT LOCATION.
4. NOTIFICATION EXTENDER PANELS TO BE MOUNTED ON WALL ABOVE DOOR AS INDICATED.



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CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
04.06.12	ISSUED FOR FINAL REVIEW	
11.0463.00	03.30.2012	

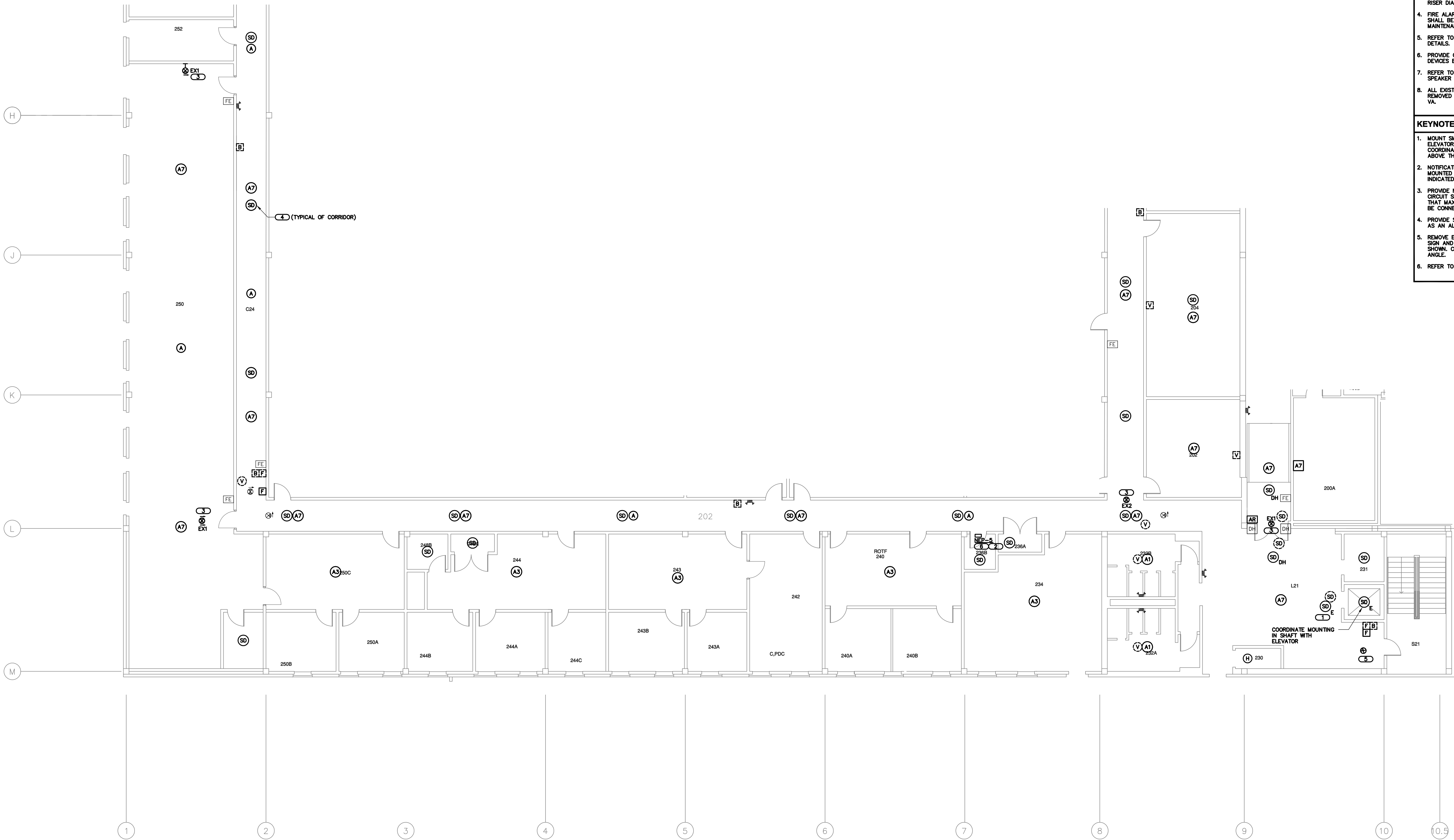
DESIGNED BY	DRAWN BY	CHECKED BY
SRH	EV	BJL

PROJECT NUMBER	DATE
11.0463.00	03.30.2012

SHEET DESCRIPTION
SECOND FLOOR PLAN - AREA A FIRE ALARM

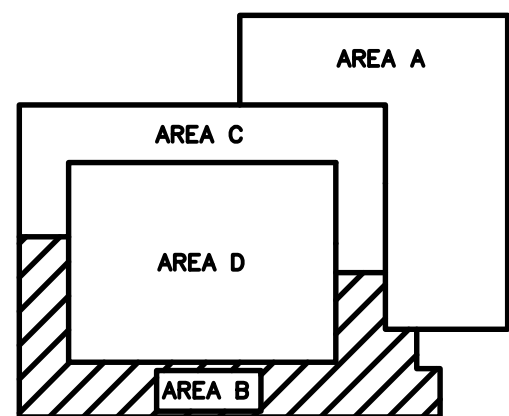
SHEET NUMBER
E201

K:\JWW\110463.00 - VA Hines Bldg. 215 New Fire Alarm System



1 SECOND FLOOR PLAN - AREA B FIRE ALARM

SCALE: 1/8"=1'-0"



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GENERAL ELECTRICAL NOTES

- REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
- ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
- REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
- FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
- REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
- PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
- REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
- ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

KEYNOTES

- MOUNT SMOKE DETECTOR WITHIN 5' OF ELEVATOR DOOR. FIELD VERIFY AND COORDINATE NEW CONDUIT LOCATION ABOVE THE CEILING.
- NOTIFICATION EXTENDER PANELS TO BE MOUNTED ON WALL ABOVE DOOR AS INDICATED.
- PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA. FIELD VERIFY THAT MAXIMUM OF 18 EXIT SIGNS SHALL BE CONNECTED TO THE CIRCUIT.
- PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
- REMOVE EXISTING CEILING MOUNTED EXIT SIGN AND RELOCATE TO NEW LOCATION SHOWN. CEILING MOUNTED AT A 45° ANGLE.
- REFER TO KEYNOTE 12 ON SHEET E104.

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CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
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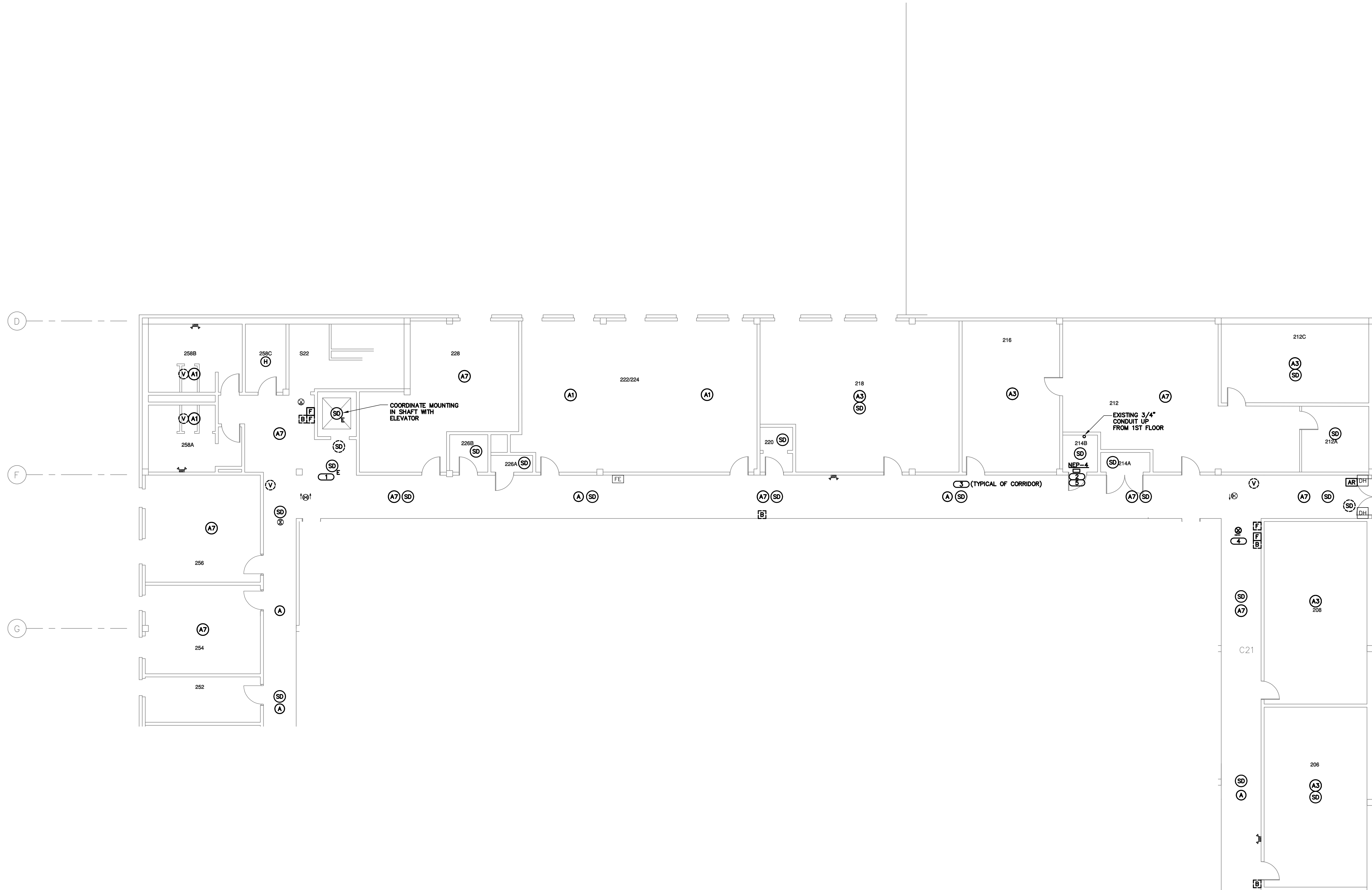
DESIGNED BY: SRH
DRAWN BY: EV
CHECKED BY: BJL

PROJECT NUMBER: 11.0463.00
DATE: 03.30.2012

SHEET DESCRIPTION: SECOND FLOOR PLAN - AREA B FIRE ALARM

SHEET NUMBER: E202

K:\JW\110463.00 - VA Hines Bldg. 215 New Fire Alarm System



1 SECOND FLOOR PLAN - AREA C FIRE ALARM

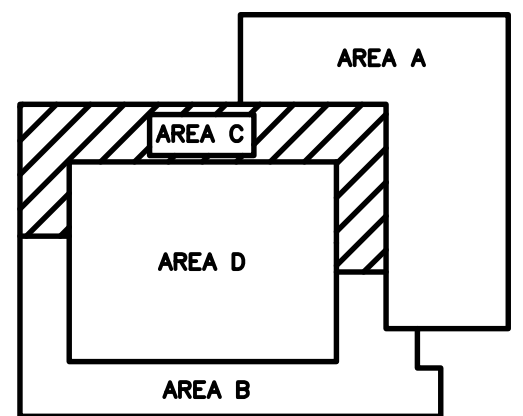
SCALE: 1/8"=1'-0"

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2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.

KEYNOTES

1. MOUNT SMOKE DETECTOR WITHIN 5' OF ELEVATOR DOOR, FIELD VERIFY AND COORDINATE NEW CONDUIT LOCATION ABOVE THE CEILING.
2. NOTIFICATION EXTENDER PANELS TO BE MOUNTED ON WALL ABOVE DOOR AS INDICATED.
3. PROVIDE SMOKE DETECTOR IN CORRIDORS AS AN ALTERNATE BID.
4. PROVIDE NEW EXIT SIGN AND CONNECT TO CIRCUIT SERVING THE AREA, FIELD VERIFY CONDUIT LOCATION AS NEEDED.
5. REFER TO KEYNOTE 7 ON SHEET E101.



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**VA Hines Bldg. 215 New Fire Alarm System
CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS**

NO.	DATE	REVISION DESCRIPTION
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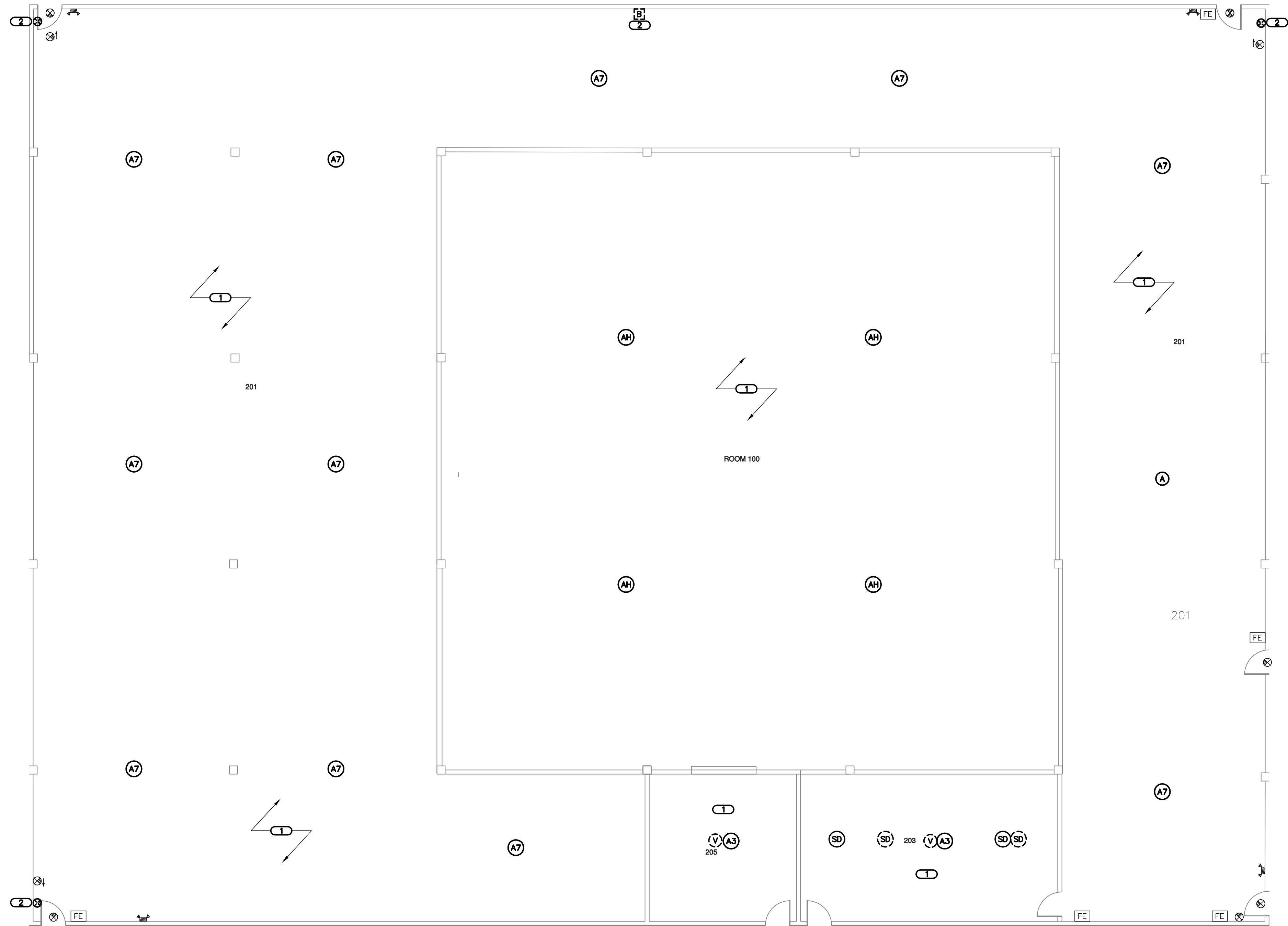
DESIGNED BY	DRAWN BY	CHECKED BY
SRH	EV	BJL

PROJECT NUMBER	DATE
11.0463.00	03.30.2012

SHEET DESCRIPTION
**SECOND FLOOR PLAN
- AREA C FIRE ALARM**

SHEET NUMBER
E203

K:\JW\2110463.00 - VA Hines Bldg. 215 New Fire Alarm System

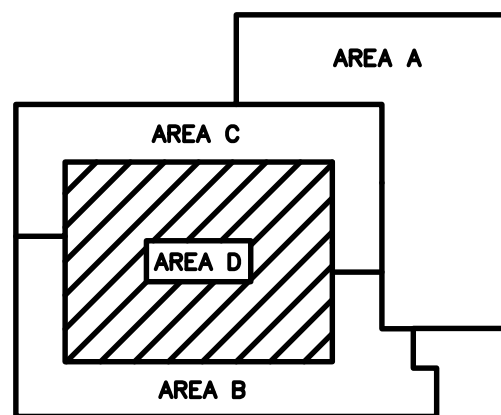


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SECOND FLOOR PLAN - AREA D FIRE ALARM

SCALE: 1/8"=1'-0"

- GENERAL ELECTRICAL NOTES**
1. REFER TO SHEET E001 FOR GENERAL ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
 2. ALL FIRE ALARM VISUAL STROBES SHALL BE SYNCHRONIZED BY CIRCUIT AND AREA.
 3. REFER TO SHEET E300 FOR FIRE ALARM RISER DIAGRAM.
 4. FIRE ALARM DEVICES MOUNTED TO CEILING SHALL BE EASILY ACCESSIBLE FOR MAINTENANCE.
 5. REFER TO SHEET E400 FOR FIRE ALARM DETAILS.
 6. PROVIDE COVER PLATES FOR ALL WALL DEVICES BEING REMOVED.
 7. REFER TO SHEET E2100 AND E2200 FOR SPEAKER ZONES.
 8. ALL EXISTING FIRE ALARM DEVICES REMOVED SHALL BE RETURNED TO THE VA.
- KEYNOTES**
1. PROVIDE NEW DEVICES AS SHOWN AND CONNECT TO NEW SIMPLEX FIRE ALARM PANEL, FAP-1.
 2. TO BE REMOVED (DEMO) BLANK OPENING.



KEYPLAN

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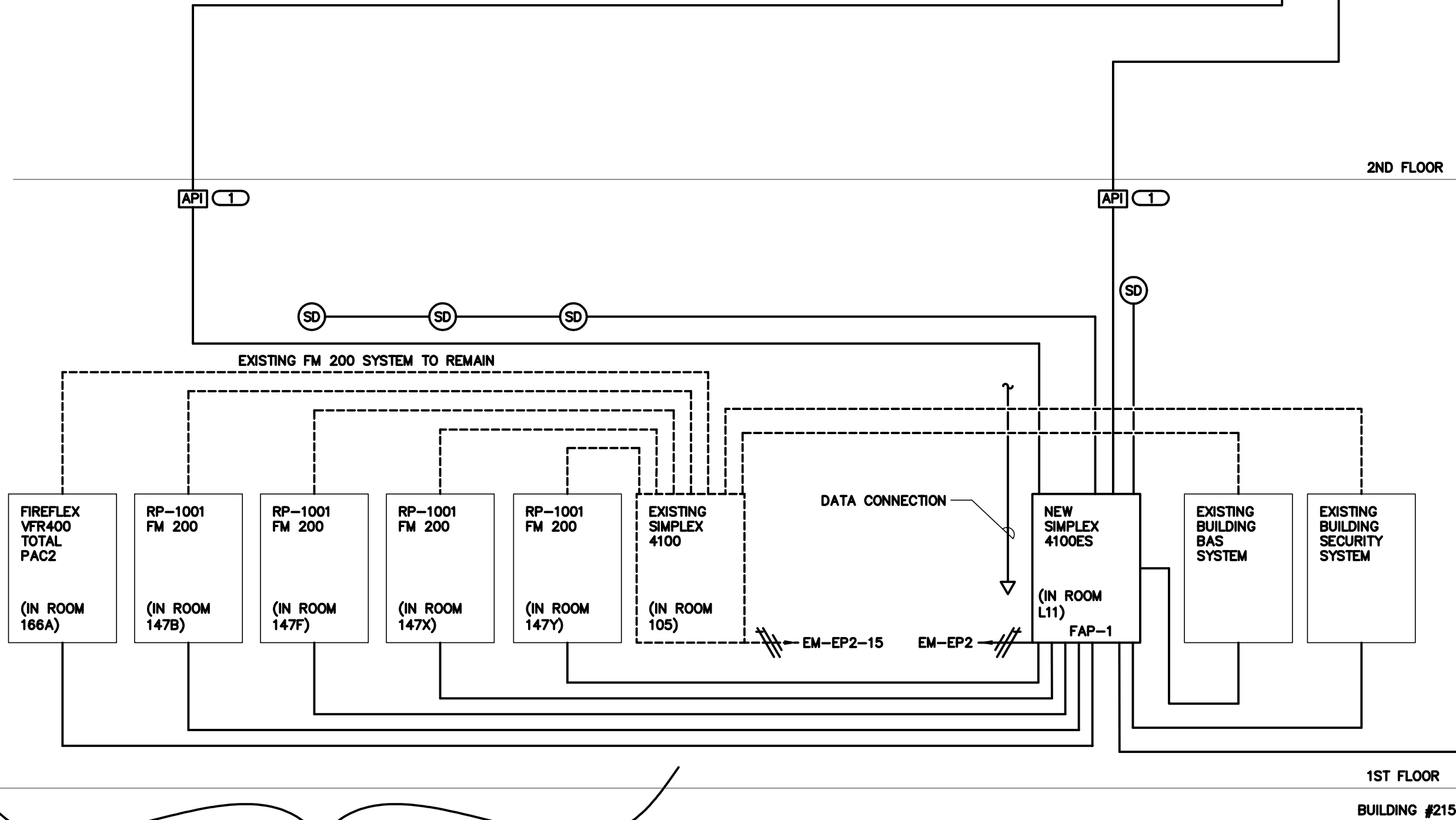
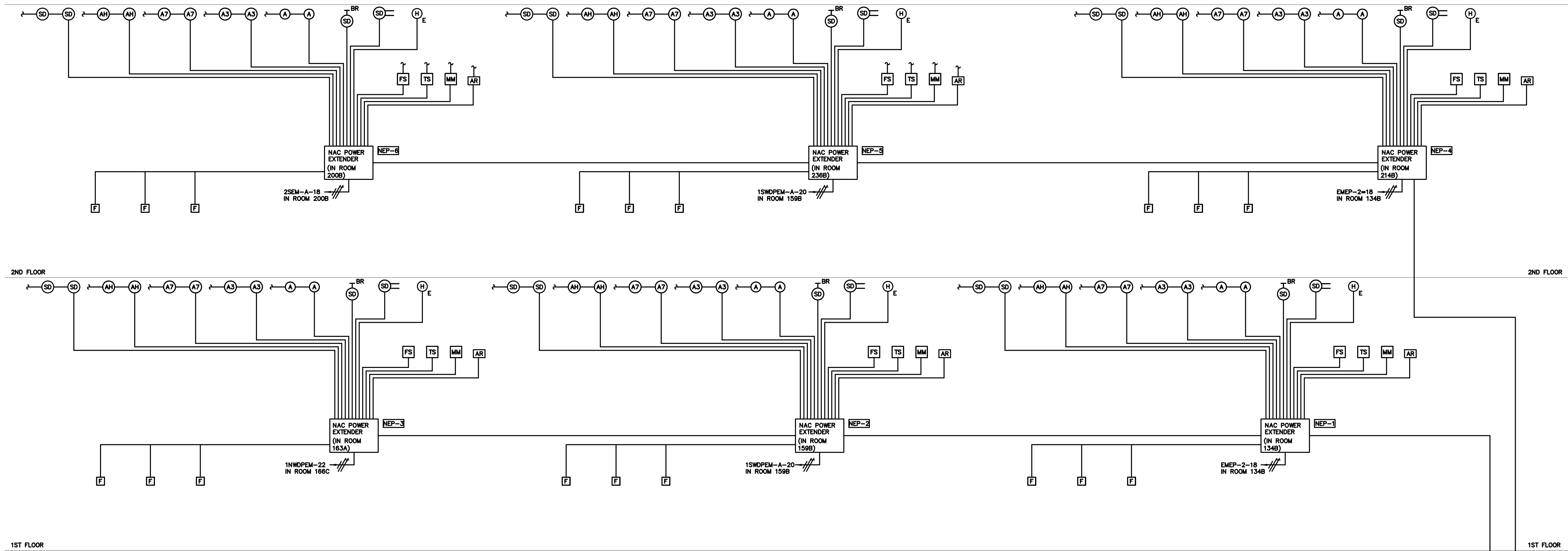
DESIGNED BY: SRH
DRAWN BY: EV
CHECKED BY: BJL

PROJECT NUMBER: 11.0463.00
DATE: 03.30.2012

SHEET DESCRIPTION:
SECOND FLOOR PLAN - AREA D FIRE ALARM

SHEET NUMBER:
E204

K:\WP1\0463.000_VA Hines Bldg. 215 New Fire Alarm System



GENERAL SYSTEM NOTES

1. NEW NOTIFICATION EXTENDER PANEL (NEP) SHALL BE MOUNTED ABOVE THE DOOR WITH IN THE ELECTRICAL CLOSETS NOTED. FIELD COORDINATE EXACT MOUNTING LOCATION.
2. PROVIDE A PADLOCKABLE HASP LOCK ALL CIRCUITS BREAKERS POWERING THE NEW NOTIFICATION EXTENDER PANELS (NEP). PAINT THIS BREAKER WITH RED PAINT POLISH.
3. THE RISER DIAGRAM IS INTENDED TO CONVEY THE TYPES OF FIRE ALARM CONNECTIONS AND SPECIFICALLY DOES NOT INDICATE EXACT QUANTITIES, NUMBER OF CIRCUITS REQUIRED OR DISTANCES.
4. THE COMPLETE FIRE ALARM SYSTEM SHALL MEET ALL APPLICABLE CODES AND MANUFACTURER'S RECOMMENDATIONS.
5. CONTRACTOR SHALL COORDINATE ALL WIRE SIZES, TYPES AND REQUIREMENTS WITH THE VENDOR PRIOR TO BID. REFER TO SPECIFICATIONS TO DETERMINE IF CONDUIT IS REQUIRED OR PLENUM RATED CABLE IS ACCEPTABLE.
6. ALL +120VAC WIRING REQUIRED FOR OPERATION OF THE SYSTEM AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
7. ALL NECESSARY RELAYS MAY NOT BE SHOWN ON THIS PLAN, BUT WHERE REQUIRED FOR PROPER OPERATION OF THE SYSTEM THEY SHALL BE PROVIDED BY THE CONTRACTOR.

KEY NOTES

1. PROVIDE AN ADDRESSABLE POWER ISOLATORS FOR EACH FLOOR AND FOR THE INSIDE AREA. FIELD COORDINATE EXACT MOUNTING LOCATION ABOVE THE CEILING TILES AND TOTAL DEVICES REQUIRED FOR COVERAGE.



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VA Hines Bldg. 215 New Fire Alarm System CONTRACT # VA69DP-0769A TASK ORDER # 23 HINES, ILLINOIS

NO.	DATE	REVISION DESCRIPTION
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REFERENCE SCALE IN INCHES
0 1 2

DESIGNED BY: SRH
DRAWN BY: EV
CHECKED BY: BJL

PROJECT NUMBER: 11.0463.00
DATE: 03.30.2012

SHEET DESCRIPTION: FIRE ALARM RISER

SHEET NUMBER: E300



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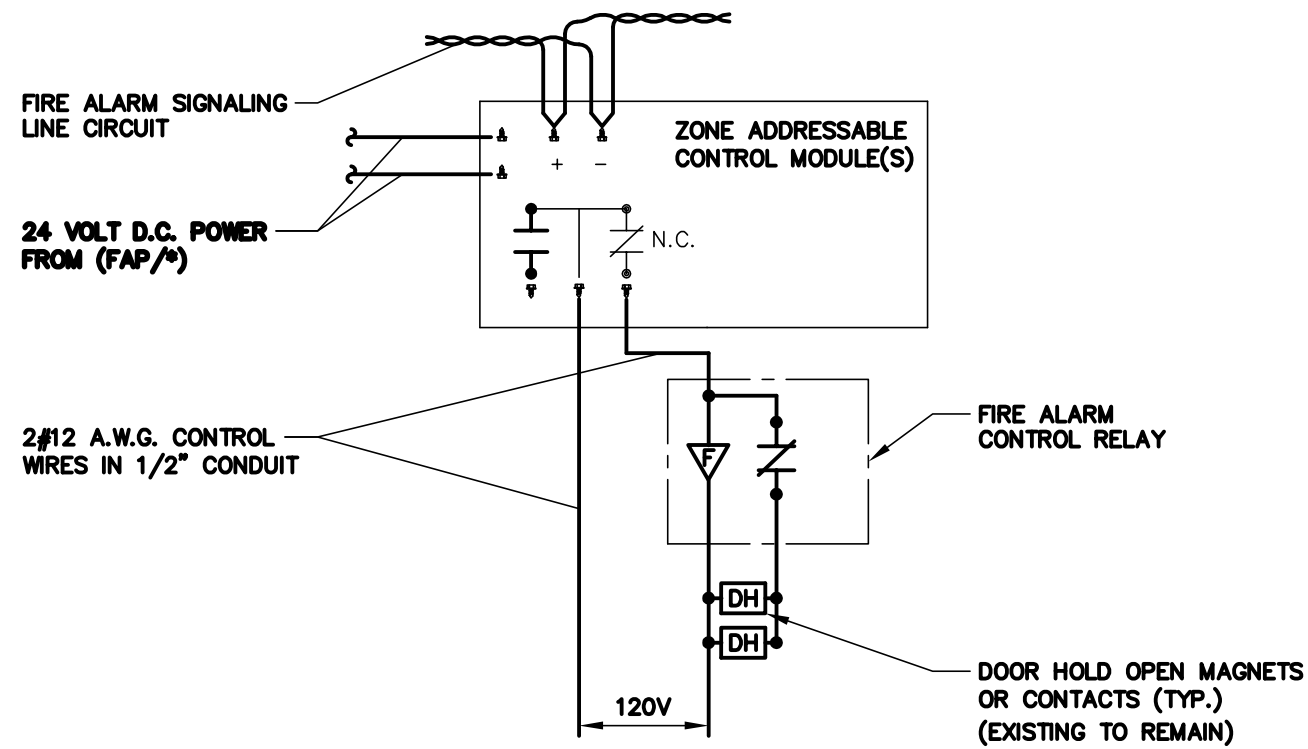
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1 FIRE ALARM RISER DIAGRAM SCALE: NTS

ELECTRICAL MATERIAL LIST			
THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM.			
CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.			
ITEM NO.	SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS
1	COVER PLATES	ALL SWITCHES, RECEPTACLES, AND OUTLETS SHALL BE COMPLETE WITH VA STANDARD COVERPLATES IN FINISHED SPACES WHERE WALLS ARE FINISHED; #302 STAINLESS STEEL COVERPLATES IN UNFINISHED SPACES FOR FLUSH BOXES; AND GALVANIZED STEEL COVERPLATES IN UNFINISHED SPACES FOR SURFACE MOUNTED BOXES. WHERE SEVERAL DEVICES ARE GANGED TOGETHER, THE COVER PLATE SHALL BE OF THE GANGED STYLE FOR THE NUMBER OF DEVICES USED. INSTALL NAMEPLATE IDENTIFICATION WHERE INDICATED PER VA REQUIREMENTS.	HUBBELL LEVITON PASS & SEYMOUR COOPER
2	▽	TECHNOLOGY ROUGH-IN, FLUSH MOUNT ON WALL OR AS NOTED IN PLANS. ALL TECHNOLOGY ROUGH-INS SHALL HAVE ONE (1) DOUBLE GANG BOX WITH SINGLE GANG PLASTER RING, APPROPRIATE COVERPLATE, AND ONE (1) 1" CONDUIT STUBBED TO ABOVE THE LAY-IN CEILING.	-
3	V1 V3 V7 WH	FIRE ALARM VISUAL NOTIFICATION APPLIANCE, HIGH-INTENSITY STROBE, RED HOUSING WITH WHITE "ALERT" LETTERING OR PICTOGRAM, SEMI-FLUSH WALL MOUNT; 24 VDC CANDELA RATINGS: V1=15, V3=30, V7=75, AND WH=110. CANDELA RATING SHALL BE VISIBLE FROM THE OUTSIDE OF THE DEVICE.	SIMPLEX 4904
4	V1 V3 V7 WH	FIRE ALARM CEILING VISUAL NOTIFICATION APPLIANCE, HIGH-INTENSITY STROBE, WHITE HOUSING WITH RED "ALERT" LETTERING OR PICTOGRAM, SEMI-FLUSH CEILING MOUNT; 24 VDC. CANDELA RATINGS: V1=15, V3=30, V7=75, WH=95, WH=115, VS=177. CANDELA RATING SHALL BE VISIBLE FROM THE OUTSIDE OF THE DEVICE.	SIMPLEX
5	A1 A3 A7 AH	FIRE ALARM VOICE/VISUAL NOTIFICATION APPLIANCE, SPEAKER WITH HIGH-INTENSITY STROBE, SEMI-FLUSH WALL MOUNT, RED HOUSING WITH WHITE "ALERT" LETTERING OR PICTOGRAM, 25 VRMS, MINIMUM OF 4 TAP SETTINGS WHICH SHALL ALLOW FIELD ADJUSTMENT OF THE SOUND OUTPUT ACROSS A MINIMUM RANGE OF 78-87 DBA (UL 1480), 400HZ-4KHZ (8DBA CUTOFF) FREQUENCY RANGE. CANDELA RATINGS: A1=15, A3=30, A7=75, AND AH=110. CANDELA RATING SHALL BE VISIBLE FROM THE OUTSIDE OF THE DEVICE.	SIMPLEX
6	A1 A3 A7 AH	FIRE ALARM VOICE/VISUAL NOTIFICATION APPLIANCE, 4" SPEAKER, ROUND HOUSING, FLUSH CEILING MOUNT (PROVIDE TILE BRIDGE WHERE APPLICABLE), WHITE WITH RED "ALERT" LETTERING OR PICTOGRAM, 25 VRMS, MINIMUM OF 4 TAP SETTINGS WHICH SHALL ALLOW FIELD ADJUSTMENT OF THE SOUND OUTPUT ACROSS A MINIMUM RANGE OF 78-87 DBA (UL 1480), 400HZ-4KHZ (8DBA CUTOFF) FREQUENCY RANGE. CANDELA RATINGS: A1=15, A3=30, A7=75, A9=95, AH=115, AS=177.	SIMPLEX
7	AW	WEATHERPROOF FIRE ALARM AUDIO/VISUAL NOTIFICATION APPLIANCE, ELECTRONIC HORN WITH HIGH-INTENSITY STROBE, SQUARE HOUSING, SEMI-FLUSH WALL MOUNT, RED WITH WHITE "ALERT" LETTERING, 75 CANDELA RATING, 24 VDC FOR NET LOCATIONS, PROVIDE WITH WEATHERPROOF BACK BOX. CONDUIT SHALL NOT BE EXPOSED.	SIMPLEX
8	A	FIRE ALARM VOICE NOTIFICATION APPLIANCE, 4" SPEAKER, ROUND HOUSING, FLUSH CEILING MOUNT (PROVIDE TILE BRIDGE WHERE APPLICABLE), WHITE WITH NO LETTERING, 25 VRMS, MINIMUM OF 4 TAP SETTINGS WHICH SHALL ALLOW FIELD ADJUSTMENT OF THE SOUND OUTPUT ACROSS A MINIMUM RANGE OF 78-87 DBA (UL 1480), 400HZ-4KHZ (8DBA CUTOFF) FREQUENCY RANGE.	SIMPLEX 4098 SERIES
9	SD	DUCT-TYPE SMOKE DETECTOR, ADDRESSABLE, ANALOG PHOTOELECTRIC SENSOR, 24 VDC, MULTI-FUNCTION LED INDICATOR, SAMPLING TUBES SIZED TO MATCH DUCT APPLICATION, HOUSING WITH COMPLETE MOUNTING ACCESSORIES. PROVIDE A REMOTE ALARM LED INDICATOR DEVICE IF DETECTOR IS NOT VISIBLE FROM A FLOOR-STANDING POSITION. IF DETECTOR IS LOCATED ABOVE A SUSPENDED CEILING, MOUNT REMOTE INDICATOR IN CEILING DIRECTLY BELOW DETECTOR WITH A WHITE SINGLE-GANG FACEPLATE LABELED: DUCT SMOKE DETECTOR.	SIMPLEX 4098 SERIES W/ 2098-9808
10	H	HEAT DETECTOR, ADDRESSABLE, ANALOG SENSOR, COMBINATION RATE OF RISE AND 135 DEGREE FAHRENHEIT FIXED TEMPERATURE, 2-WIRE OPERATION, 24 VDC, 2-PIECE DESIGN, LOW-PROFILE MOUNTING BASE WITH MULTI-FUNCTION LED INDICATOR, COMPLETE WITH MOUNTING HARDWARE AND BACKBOX, PROVIDE A REMOTE LED INDICATOR DEVICE IF DETECTOR IS NOT VISIBLE FROM A FLOOR-STANDING POSITION. A SUBSCRIPT IS USED TO IDENTIFY THE DEVICE WITH A SPECIFIC SEQUENCE OF OPERATION AS FOLLOWS: E = ELEVATOR SHUTDOWN.	SIMPLEX 4098 SERIES
11	BR BT SD	PROJECTED BEAM TYPE SMOKE DETECTOR TRANSMITTER AND RECEIVER, MICROPROCESSOR BASED DESIGN, ACCESS COVERS MONITORED BY INTEGRAL TAMPER SWITCH, ALARM AND TROUBLE AUXILIARY OUTPUT CONTACTS, RED HOUSING WITH BLACK FACE, MATCHING REMOTE INDICATOR/TEST PANEL, 24 VDC, PROVIDE WITH TWO (2) ADDRESSABLE MONITOR MODULES FOR MONITORING ALARM AND TROUBLE OUTPUT CONTACTS.	SIMPLEX 4098 SERIES
12	F	FIRE ALARM MANUAL PULL STATION, ADDRESSABLE, SINGLE ACTION, RESET KEY LOCK, SEMI-FLUSH MOUNT, RED HIGH-ABUSE PLASTIC OR CAST METAL CONSTRUCTION WITH WHITE LETTERING. USE SURFACE MOUNT ONLY ON PRECAST CONCRETE OR STRUCTURE.	SIMPLEX 2098 SERIES
13	AR	FIRE ALARM ADDRESSABLE RELAY CONSISTING OF AN ADDRESSABLE CONTROL MODULE AND SLAVE RELAY WITH CONTACTS SUITABLE FOR CONTROLLING THE DESIGNATED AUXILIARY LOAD, 24 VDC, 4-WIRE OPERATION, SURFACE MOUNT ENCLOSURE, PROVIDE A SURFACE ENCLOSURE WHERE LOCATED ABOVE CEILING OR IN UNFINISHED SPACE. PROVIDE A FLUSH ENCLOSURE IN FINISHED SPACE.	SIMPLEX 2190 SERIES 2098 SERIES
14	MM	FIRE ALARM ADDRESSABLE MONITOR MODULE FOR CONVENTIONAL CLASS B CIRCUITS, 24 VDC, 4-WIRE OPERATION, INTEGRAL END-OF-LINE RESISTOR/RELAY, PROVIDE A SURFACE ENCLOSURE WHERE LOCATED ABOVE CEILING OR IN UNFINISHED SPACE. PROVIDE A FLUSH ENCLOSURE IN FINISHED SPACE.	SIMPLEX 2190 SERIES
15	FS	CONNECTION TO FLOW SWITCH TO MONITOR FIRE PROTECTION FLOW SWITCH OR DISCHARGE OUTPUT CONTACTS, NORMALLY-OPEN DRY CONTACTS FOR FIRE ALARM INTERFACE, FURNISHED AND INSTALLED BY M.C., WIRED BY E.C.	EXISTING TO REMAIN
16	TS	CONNECTION TO MONITOR SWITCH TO MONITOR FIRE PROTECTION SYSTEM SUPERVISORY SWITCHES OR OUTPUT CONTACTS, NORMALLY-OPEN DRY CONTACTS FOR FIRE ALARM INTERFACE, FURNISHED AND INSTALLED BY M.C., WIRED BY E.C.	EXISTING TO REMAIN
17	▽	FIRE FIGHTERS MICROPHONE FOR COMMUNICATIONS IN VOICE COMMAND CENTER.	SIMPLEX
18	SD	SMOKE DETECTOR, PHOTOELECTRIC TYPE, 2-WIRE OPERATION, 24 VDC, 2-PIECE DESIGN, LOW-PROFILE MOUNTING BASE WITH LED ALARM INDICATOR, COMPLETE WITH MOUNTING HARDWARE AND BACKBOX, PROVIDE A REMOTE LED INDICATOR DEVICE IF DETECTOR IS NOT VISIBLE FROM A FLOOR-STANDING POSITION. A SUBSCRIPT IS USED TO IDENTIFY THE DEVICE WITH A SPECIFIC SEQUENCE OF OPERATION AS FOLLOWS: E = ELEVATOR RECALL, SD = SMOKE DAMPERS, DH = DOOR HOLD RELEASE, ALL DETECTORS IDENTIFIED WITH A SUBSCRIPT SHALL BE FURNISHED WITH AN AUXILIARY CONTACT.	SIMPLEX 2098 SERIES
19	▽	FIRE ALARM AUXILIARY CONTROL RELAY WITH CONTACTS SUITABLE FOR CONTROLLING THE DESIGNATED AUXILIARY LOAD, 24 VDC, 2-WIRE OPERATION, SURFACE MOUNT ENCLOSURE.	SIMPLEX 2098 SERIES
20	RTS	DUCT DETECTOR REMOTE TEST STATION, WITH RED LED STATUS INDICATOR AND REMOTE TEST KEY SWITCH ON A SINGLE GANG STAINLESS STEEL PLATE.	SIMPLEX 2098-9808
21	EAP-1	FIRE ALARM CONTROL PANEL, ADDRESSABLE SYSTEM, SEMI-FLUSH, WITH MICROPHONE, AMPLIFIERS, PROGRAMMABLE KEYPAD, LCD DISPLAY, PAC, DIGITIZED VOICE MESSAGES, EXPANDABLE MODULAR DESIGN, MICROPROCESSOR BASED ELECTRONICS, 120 VAC OPERATION. REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.	SIMPLEX 4100ES SERIES
22	NEP-#	NAC (NOTIFICATION APPLIANCE CIRCUIT) EXTENDER PANEL, INTEGRAL BATTERY BACKUP, 120 VAC OPERATION, SURFACE MOUNT. REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.	SAME MANUFACTURER AS FIRE ALARM CONTROL PANEL
23	AP	ADDRESSABLE POWER ISOLATOR, FOR 4100ES/4100U/4010ES IDNET COMMUNICATIONS, PROVIDE SURFACE MOUNTED TRM PLATE 4090-9802 PROVIDE DOUBLE GANG BOX PER MANUFACTURERS RECOMMENDATIONS.	SIMPLEX 4090-9117

LUMINAIRE SCHEDULE									
MOUNTING: (MTG)		LAMP TYPE:				LENS/LOUVER: (LA)			
		RE - RECESSED	FL - FLUORESCENT			A - 12" ACRYLIC			
DOOR:	SP - SUSPENDED	BY M.C. CF - COMPACT FLUORESCENT				B - BLACK BAFFLE			
	CL - CEILING SURFACE	HL - HALOGEN			C - CLEAR ALZAK				
	WL - WALL	IN - INCANDESCENT			D - PARABOLIC				
	UC - UNDER CABINET	LED - LIGHT EMITTING DIODE			F - FRESNEL				
	CV - COVE	HS - HIGH PRESSURE SODIUM			G - TEMPERED GLASS				
	PL - POLE	MH - METAL HALIDE			H - WALL WASHER				
	O - OTHER (SEE DESCRIPTION)	SMH - SUPER METAL HALIDE			P - POLYCARBONATE				
		PSMH - PULSE START METAL HALIDE			K - KSH12, 12" ACRYLIC				
		CMH - CERAMIC METAL HALIDE			K19 - KSH19, 19" ACRYLIC				
		QRS - QUARTZ RESTRKE			L - LOW RIDESCENT SPECULAR ALUM.				
FINISH:	FA - FLAT ALUMINUM	XL - EXTENDED LIFE			M - NONE				
	FS - FLAT STEEL	XLP - EXTENDED LIFE & OUTPUT			R - HIGH IMPACT DR ACRYLIC				
	RA - REGRESSED ALUMINUM				O - OTHER (SEE DESCRIPTION)				
	RS - REGRESSED STEEL								
		BALLAST: (BLS)				#B/F - BALLAST FACTOR			
		DM - DIMMING BALLAST			HL - HIGH / LOW LEVEL BALLAST				
		EB - ELECTRONIC BALLAST			HP - HIGH PERFORMANCE				
		EM - EMERGENCY BATTERY/BALLAST			ML - MULTI-LEVEL SWITCHING				
		DALJ - DIGITAL DIMMING BALLAST			MV - MULTI-VOLTAGE ELECTRONIC				
CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN. REFER TO SPECIFICATION SECTIONS INTERIOR LIGHTING 16511 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.									
ALL FLUORESCENT FIXTURES SHALL BE INTERNALLY FUSED. ALL LAMPS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. FLUORESCENT LAMP CORRELATED COLOR TEMPERATURE 3500° COLOR RENDERING INDEX (CRI) AT OR ABOVE .80, UNLESS NOTED OTHERWISE.									
ITEM	DESCRIPTION	SIZE	MTG	TYPE	QUANTITY & SIZE	VOLTS / BLS	L/L	APPROVED MANUFACTURER	
EX1	STEEL BOX LED EXIT SIGN WITH RED LETTERS ON WHITE BACKGROUND, WITH BATTERY BACK-UP, SINGLE AND DOUBLE FACE.	12 1/4" W 4 1/2" x 9" H	CL	LED	5 WATT L.E.D.	120V EB EM MV	P	SURE-LITE CHX800 SERIES ALDO E-LED SERIES EXTITRONIX CSX-LED SERIES MCPHILBEN MCSLED SERIES	
EX2	COMBINATION EXIT AND EMERGENCY LIGHTING UNIT.	12 1/4" W 4 1/2" x 9" H	CL	LED	5 WATT L.E.D.	120V EB EM MV	P	EXTITRONIX VLED-ELR0 OR MATCH EXISTING BUILDING TYPE.	
EX3	EMERGENCY LIGHTING UNIT.	12 1/4" W 4 1/2" x 9" H	WL	IN	5 WATT MR11	120V EB EM MV	P	MATCH EXISTING BUILDING TYPE. MCPHILBEN CFS SERIES	



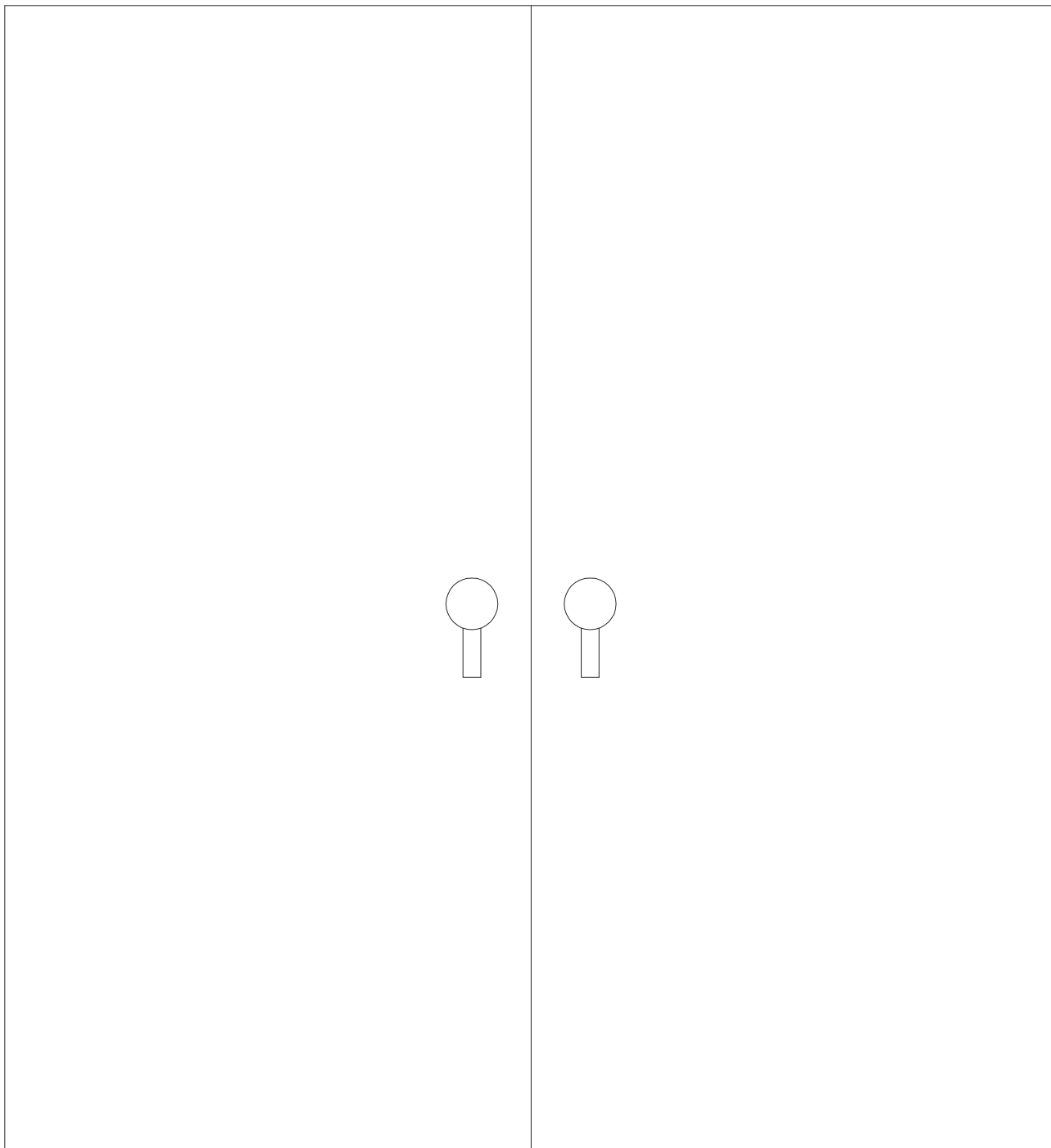
2 SMOKE DOOR RELEASE DETAIL

NO SCALE

NOTES:

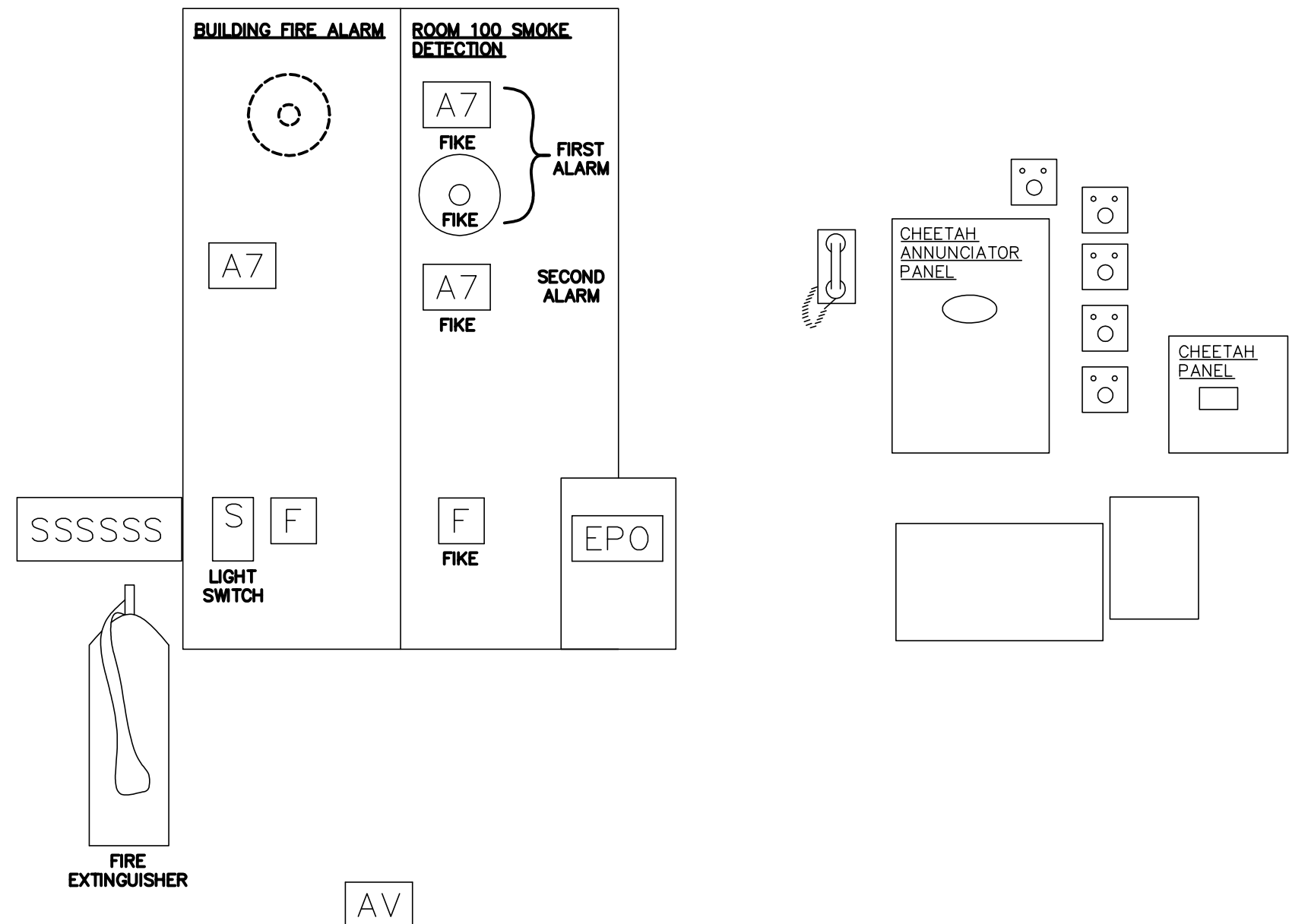
1. SEQUENCE OF OPERATION:

DOOR HOLD OPENS ARE ENERGIZED THRU CONTROL MODULE UPON ACTIVATION OF ANY SMOKE DETECTOR ON FLOOR, DOORS WILL BE RELEASED. UPON ACTIVATION OF ANY SMOKE DETECTOR ON FLOOR ABOVE OR BELOW, DOORS WILL BE RELEASED.



3 PREACTION SUPPRESSION SYSTEM WALL DETAIL ROOM 100

NO SCALE



1 FIRE ALARM OPERATION MATRIX

NO SCALE

NOTES:

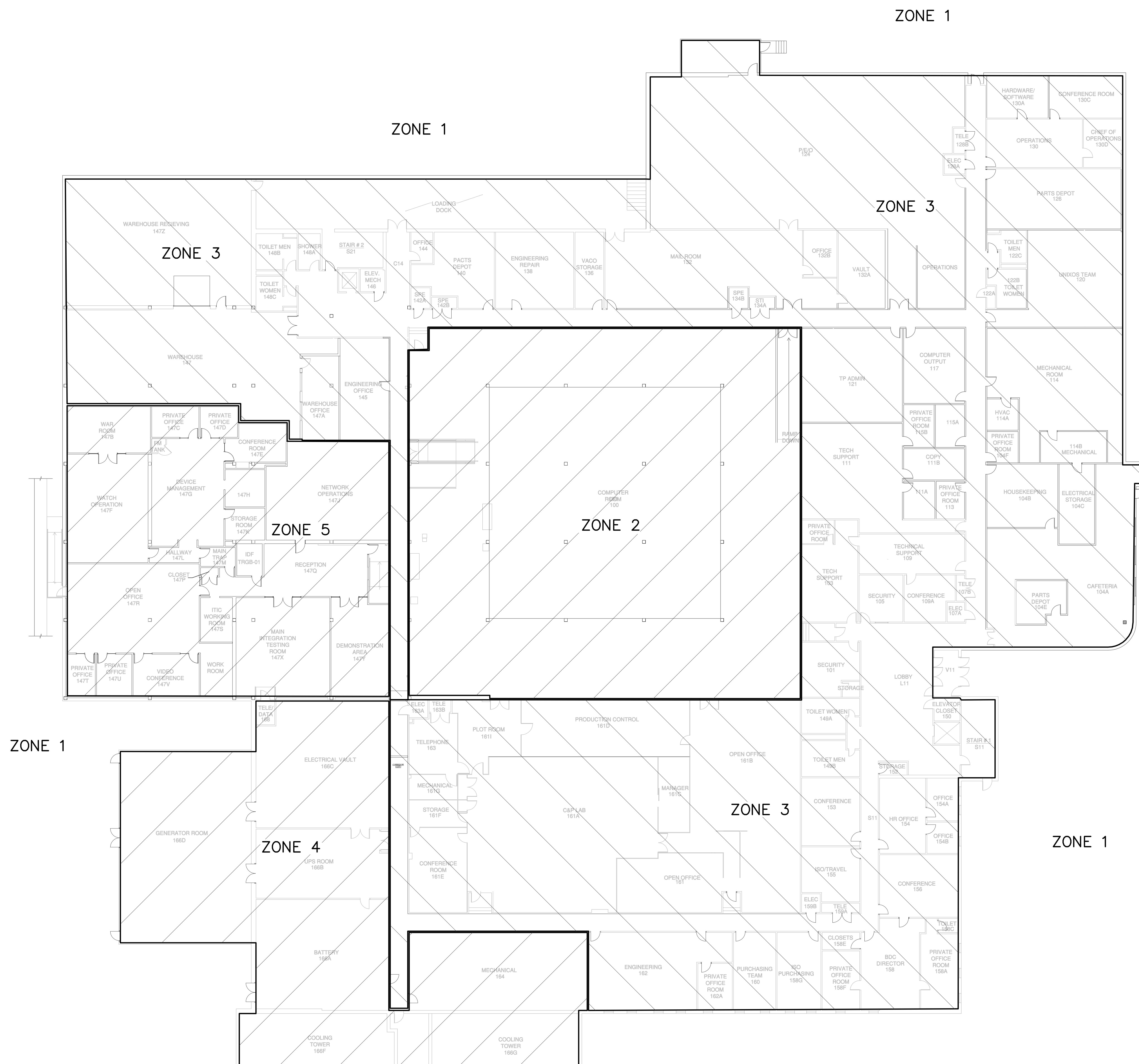
1. ALL SYSTEM EVENTS SHALL BE LOGGED, PRINTED, AND DISPLAYED ON THE FACP DISPLAY. SEE SPECIFICATIONS FOR MORE INFORMATION AND DESCRIPTIONS OF SEQUENCES OF OPERATION.

KEYNOTES:

(E2) UTILIZE A GENERAL PURPOSE RELAY TO MONITOR POWER LOSS. CONNECT THE CONTACTS OF THE RELAY TO A FIRE ALARM MONITOR MODULE.

(E2) UPON DETECTION BY (2) TWO SMOKE DEVICES.

**VA Hines Bldg. 215 New Fire Alarm System
CONTRACT # VA69DP-0769A TASK ORDER # 23
HINES, ILLINOIS**

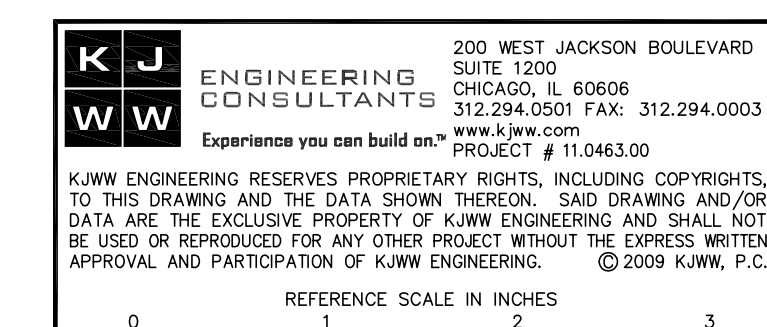


- ZONE 1 = EXTERIOR
 ZONE 2 = ROOM 100
 ZONE 3 = 1ST FLOOR GENERAL OFFICE
 ZONE 4 = 1ST FLOOR NORTH EAST UTILITY
 ZONE 5 = NSOC
 ZONE 6 = 2ND FLOOR ORIGINAL BUILDING
 ZONE 7 = 2ND FLOOR SOUTH ADDITION



FIRST FLOOR PLAN - SPEAKER NOTIFICATION ZONE

SCALE- NOT TO SCALE



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<p style="text-align: center;">0 1 2 REFERENCE SCALE IN INCHES</p>			
DESIGNED BY		DRAWN BY	
SRH		EV	
PROJECT NUMBER		DATE	
11.0463.00		03.30.2012	
SHEET DESCRIPTION			
<p>FIRST FLOOR PLAN – SPEAKER NOTIFICATION ZONE</p>			
SHEET NUMBER			
EZ100			

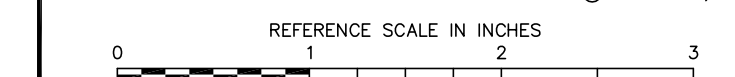
HINES, ILLINOIS




- ZONE 7 = 2ND FLOOR SOUTH ADDITION



SCALE: NOT TO SCALE



REFERENCE SCALE IN INCHES



EZ200

EZ200